Rank-68 over GF(64)

January 15, 2021

The equation

The equation of the surface is:

$$X_1^3 + X_2^3 + X_0^2 X_1 + X_0^2 X_2 = 0$$

General information

Number of lines	4225
Number of points	8257
Number of singular points	65
Number of Eckardt points	0
Number of double points	0
Number of single points	4096
Number of points off lines	0
Number of Hesse planes	0
Number of axes	0
Type of points on lines	65^{4225}
Type of lines on points	$129, 65^{4160}, 1^{4096}$

Singular Points

The surface has 65 singular points:

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\begin{array}{lll} 0: \ P_3 = \mathbf{P}(0,0,0,1) = \mathbf{P}(0,0,0,1) & 9: \ P_{37449} = \mathbf{P}(\epsilon^3,\epsilon^3,\epsilon^3,1) = \mathbf{P}(8,8,8,1) \\ 1: \ P_4 = \mathbf{P}(1,1,1,1) = \mathbf{P}(1,1,1,1) & 10: \ P_{41610} = \mathbf{P}(\epsilon^{34},\epsilon^{34},\epsilon^{34},1) = \mathbf{P}(9,9,9,1) \\ 2: \ P_{132} = \mathbf{P}(1,1,1,0) = \mathbf{P}(1,1,1,0) & 11: \ P_{45771} = \mathbf{P}(\epsilon^{54},\epsilon^{54},\epsilon^{54},1) = \mathbf{P}(10,10,10,1) \\ 3: \ P_{12483} = \mathbf{P}(\epsilon,\epsilon,\epsilon,1) = \mathbf{P}(2,2,2,1) & 12: \ P_{49932} = \mathbf{P}(\epsilon^{18},\epsilon^{18},\epsilon^{18},1) = \mathbf{P}(11,11,11,1) \\ 4: \ P_{16644} = \mathbf{P}(\epsilon^{58},\epsilon^{58},\epsilon^{58},1) = \mathbf{P}(3,3,3,1) & 13: \ P_{54093} = \mathbf{P}(\epsilon^{60},\epsilon^{60},\epsilon^{60},1) = \mathbf{P}(12,12,12,1) \\ 5: \ P_{20805} = \mathbf{P}(\epsilon^2,\epsilon^2,\epsilon^2,1) = \mathbf{P}(4,4,4,1) & 14: \ P_{58254} = \mathbf{P}(\epsilon^{31},\epsilon^{31},\epsilon^{31},1) = \mathbf{P}(13,13,13,1) \\ 6: \ P_{24966} = \mathbf{P}(\epsilon^{53},\epsilon^{53},\epsilon^{53},\epsilon^{53},1) = \mathbf{P}(5,5,5,1) & 15: \ P_{62415} = \mathbf{P}(\epsilon^{40},\epsilon^{40},\epsilon^{40},\epsilon^{40},1) = \mathbf{P}(14,14,14,1) \\ 7: \ P_{29127} = \mathbf{P}(\epsilon^{59},\epsilon^{59},\epsilon^{59},1) = \mathbf{P}(6,6,6,1) & 16: \ P_{66576} = \mathbf{P}(\epsilon^{48},\epsilon^{48},\epsilon^{48},1) = \mathbf{P}(15,15,15,1) \\ 8: \ P_{33288} = \mathbf{P}(\epsilon^{31},\epsilon^{31},\epsilon^{32},1) = \mathbf{P}(7,7,7,1) & 17: \ P_{70737} = \mathbf{P}(\epsilon^4,\epsilon^4,\epsilon^4,1) = \mathbf{P}(16,16,16,1) \end{array}
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18: P_{74898} = \mathbf{P}(\epsilon^{43}, \epsilon^{43}, \epsilon^{43}, 1) = \mathbf{P}(17, 17, 17, 1)
                                                                                                                         42: P_{174762} = \mathbf{P}(\epsilon^{37}, \epsilon^{37}, \epsilon^{37}, 1) = \mathbf{P}(41, 41, 41, 1)
19: P_{79059} = \mathbf{P}(\epsilon^{35}, \epsilon^{35}, \epsilon^{35}, 1) = \mathbf{P}(18, 18, 18, 1)
                                                                                                                         43: P_{178923} = \mathbf{P}(\epsilon^{16}, \epsilon^{16}, \epsilon^{16}, 1) = \mathbf{P}(42, 42, 42, 1)
20: P_{83220} = \mathbf{P}(\epsilon^{22}, \epsilon^{22}, \epsilon^{22}, 1) = \mathbf{P}(19, 19, 19, 1)
                                                                                                                         44: P_{183084} = \mathbf{P}(\epsilon^{46}, \epsilon^{46}, \epsilon^{46}, 1) = \mathbf{P}(43, 43, 43, 1)
21: P_{87381} = \mathbf{P}(\epsilon^{55}, \epsilon^{55}, \epsilon^{55}, 1) = \mathbf{P}(20, 20, 20, 1)
                                                                                                                         45: P_{187245} = \mathbf{P}(\epsilon^{20}, \epsilon^{20}, \epsilon^{20}, 1) = \mathbf{P}(44, 44, 44, 1)
                                                                                                                        46: P_{191406} = \mathbf{P}(\epsilon^{24}, \epsilon^{24}, \epsilon^{24}, 1) = \mathbf{P}(45, 45, 45, 1)

47: P_{195567} = \mathbf{P}(\epsilon^{27}, \epsilon^{27}, \epsilon^{27}, 1) = \mathbf{P}(46, 46, 46, 1)
22: P_{91542} = \mathbf{P}(\epsilon^{15}, \epsilon^{15}, \epsilon^{15}, 1) = \mathbf{P}(21, 21, 21, 1)
23: P_{95703} = \mathbf{P}(\epsilon^{19}, \epsilon^{19}, \epsilon^{19}, 1) = \mathbf{P}(22, 22, 22, 1)
24: P_{99864} = \mathbf{P}(\epsilon^{26}, \epsilon^{26}, \epsilon^{26}, 1) = \mathbf{P}(23, 23, 23, 1)
                                                                                                                         48: P_{199728} = \mathbf{P}(\epsilon^9, \epsilon^9, \epsilon^9, 1) = \mathbf{P}(47, 47, 47, 1)
25: P_{104025} = \mathbf{P}(\epsilon^{61}, \epsilon^{61}, \epsilon^{61}, 1) = \mathbf{P}(24, 24, 24, 1)
                                                                                                                        49: P_{203889} = \mathbf{P}(\epsilon^{62}, \epsilon^{62}, \epsilon^{62}, 1) = \mathbf{P}(48, 48, 48, 1)
26: P_{108186} = \mathbf{P}(\epsilon^{51}, \epsilon^{51}, \epsilon^{51}, 1) = \mathbf{P}(25, 25, 25, 1)
                                                                                                                        50: P_{208050} = \mathbf{P}(\epsilon^{57}, \epsilon^{57}, \epsilon^{57}, 1) = \mathbf{P}(49, 49, 49, 1)
27: P_{112347} = \mathbf{P}(\epsilon^{32}, \epsilon^{32}, \epsilon^{32}, 1) = \mathbf{P}(26, 26, 26, 1)
                                                                                                                        51: P_{212211} = \mathbf{P}(\epsilon^{52}, \epsilon^{52}, \epsilon^{52}, 1) = \mathbf{P}(50, 50, 50, 1)
28: P_{116508} = \mathbf{P}(\epsilon^{29}, \epsilon^{29}, \epsilon^{29}, 1) = \mathbf{P}(27, 27, 27, 1)
                                                                                                                        52: P_{216372} = \mathbf{P}(\epsilon^{38}, \epsilon^{38}, \epsilon^{38}, 1) = \mathbf{P}(51, 51, 51, 1)
29: P_{120669} = \mathbf{P}(\epsilon^{41}, \epsilon^{41}, \epsilon^{41}, 1) = \mathbf{P}(28, 28, 28, 1)
                                                                                                                        53: P_{220533} = \mathbf{P}(\epsilon^{33}, \epsilon^{33}, \epsilon^{33}, 1) = \mathbf{P}(52, 52, 52, 1)
                                                                                                                        54: P_{224694} = \mathbf{P}(\epsilon^{17}, \epsilon^{17}, \epsilon^{17}, 1) = \mathbf{P}(53, 53, 53, 1)
30: P_{124830} = \mathbf{P}(\epsilon^{13}, \epsilon^{13}, \epsilon^{13}, 1) = \mathbf{P}(29, 29, 29, 1)
31: P_{128991} = \mathbf{P}(\epsilon^{49}, \epsilon^{49}, \epsilon^{49}, 1) = \mathbf{P}(30, 30, 30, 1)
                                                                                                                        55: P_{228855} = \mathbf{P}(\epsilon^{30}, \epsilon^{30}, \epsilon^{30}, 1) = \mathbf{P}(54, 54, 54, 1)
                                                                                                                        56: P_{233016} = \mathbf{P}(\epsilon^{47}, \epsilon^{47}, \epsilon^{47}, 1) = \mathbf{P}(55, 55, 55, 1)
32: P_{133152} = \mathbf{P}(\epsilon^{11}, \epsilon^{11}, \epsilon^{11}, 1) = \mathbf{P}(31, 31, 31, 1)
                                                                                                                        57: P_{237177} = \mathbf{P}(\epsilon^{42}, \epsilon^{42}, \epsilon^{42}, 1) = \mathbf{P}(56, 56, 56, 1)
33: P_{137313} = \mathbf{P}(\epsilon^5, \epsilon^5, \epsilon^5, 1) = \mathbf{P}(32, 32, 32, 1)
34: P_{141474} = \mathbf{P}(\epsilon^6, \epsilon^6, \epsilon^6, 1) = \mathbf{P}(33, 33, 33, 1)
                                                                                                                        58: P_{241338} = \mathbf{P}(\epsilon^{21}, \epsilon^{21}, \epsilon^{21}, 1) = \mathbf{P}(57, 57, 57, 1)
                                                                                                                        59: P_{245499} = \mathbf{P}(\epsilon^{14}, \epsilon^{14}, \epsilon^{14}, 1) = \mathbf{P}(58, 58, 58, 1)
35: P_{145635} = \mathbf{P}(\epsilon^{44}, \epsilon^{44}, \epsilon^{44}, 1) = \mathbf{P}(34, 34, 34, 1)
                                                                                                                        60: P_{249660} = \mathbf{P}(\epsilon^{25}, \epsilon^{25}, \epsilon^{25}, 1) = \mathbf{P}(59, 59, 59, 1)
36: P_{149796} = \mathbf{P}(\epsilon^7, \epsilon^7, \epsilon^7, 1) = \mathbf{P}(35, 35, 35, 1)
                                                                                                                        61: P_{253821} = \mathbf{P}(\epsilon^{50}, \epsilon^{50}, \epsilon^{50}, 1) = \mathbf{P}(60, 60, 60, 1)
37: P_{153957} = \mathbf{P}(\epsilon^{36}, \epsilon^{36}, \epsilon^{36}, 1) = \mathbf{P}(36, 36, 36, 1)
38: P_{158118} = \mathbf{P}(\epsilon^{45}, \epsilon^{45}, \epsilon^{45}, 1) = \mathbf{P}(37, 37, 37, 1)
                                                                                                                        62: P_{257982} = \mathbf{P}(\epsilon^{28}, \epsilon^{28}, \epsilon^{28}, 1) = \mathbf{P}(61, 61, 61, 1)
                                                                                                                        63: P_{262143} = \mathbf{P}(\epsilon^{12}, \epsilon^{12}, \epsilon^{12}, 1) = \mathbf{P}(62, 62, 62, 1)
39: P_{162279} = \mathbf{P}(\epsilon^{23}, \epsilon^{23}, \epsilon^{23}, 1) = \mathbf{P}(38, 38, 38, 1)
40: P_{166440} = \mathbf{P}(\epsilon^8, \epsilon^8, \epsilon^8, 1) = \mathbf{P}(39, 39, 39, 1)
41: P_{170601} = \mathbf{P}(\epsilon^{56}, \epsilon^{56}, \epsilon^{56}, 1) = \mathbf{P}(40, 40, 40, 1)
                                                                                                                        64: P_{266304} = \mathbf{P}(\epsilon^{10}, \epsilon^{10}, \epsilon^{10}, 1) = \mathbf{P}(63, 63, 63, 1)
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The 4225 Lines

The lines and their Pluecker coordinates are:

$$\ell_0 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 0 \end{bmatrix}_1 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 0 \end{bmatrix}_1 = \mathbf{PI}(1,0,1,0,0,0)_3$$

$$\ell_1 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4160} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4160} = \mathbf{PI}(0,0,0,0,1,0)_{4225}$$

$$\ell_2 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{65} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{65} = \mathbf{PI}(1,0,1,0,1,0)_{4353}$$

$$\ell_3 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{3073} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{3073} = \mathbf{PI}(2,0,2,0,1,0)_{4481}$$

$$\ell_4 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{2049} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{2049} = \mathbf{PI}(3,0,3,0,1,0)_{4609}$$

$$\ell_5 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{1537} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{1537} = \mathbf{PI}(4,0,4,0,1,0)_{4737}$$

$$\ell_6 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{4033} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{4033} = \mathbf{PI}(5,0,5,0,1,0)_{4865}$$

$$\ell_7 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{1025} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{1025} = \mathbf{PI}(6,0,6,0,1,0)_{4993}$$

$$\ell_8 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{2881} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2881} = \mathbf{PI}(7,0,7,0,1,0)_{5121}$$

$$\ell_9 = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{769} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{769} = \mathbf{PI}(8,0,8,0,1,0)_{5249}$$

$$\begin{split} \ell_{10} &= \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{1729} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{1729} = \mathbf{PI}(9,0,9,0,1,0)_{5377} \\ \ell_{11} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{3} \end{bmatrix}_{3009} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{3009} = \mathbf{PI}(10,0,10,0,1,0)_{5505} \\ \ell_{12} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{2369} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{2369} = \mathbf{PI}(11,0,11,0,1,0)_{5633} \\ \ell_{13} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{3} \end{bmatrix}_{513} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{513} = \mathbf{PI}(12,0,12,0,1,0)_{5761} \\ \ell_{14} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{1665} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{1665} = \mathbf{PI}(13,0,13,0,1,0)_{5889} \\ \ell_{15} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{2433} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{1665} = \mathbf{PI}(14,0,14,0,1,0)_{6017} \\ \ell_{16} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{2433} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{1345} = \mathbf{PI}(15,0,15,0,1,0)_{6145} \\ \ell_{17} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{385} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{385} = \mathbf{PI}(16,0,16,0,1,0)_{6273} \\ \ell_{18} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{2817} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{2817} = \mathbf{PI}(17,0,17,0,1,0)_{6401} \\ \ell_{19} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{3905} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{1793} = \mathbf{PI}(18,0,18,0,1,0)_{6529} \\ \ell_{20} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{1793} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{1793} = \mathbf{PI}(20,0,20,0,1,0)_{6785} \\ \ell_{21} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{48} \end{bmatrix}_{961} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{2497} = \mathbf{PI}(22,0,22,0,1,0)_{7041} \\ \ell_{24} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3695} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{2497} = \mathbf{PI}(22,0,22,0,1,0)_{7041} \\ \ell_{24} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{2625} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{2477} = \mathbf{PI}(24,0,24,0,1,0)_{7297} \\ \ell_{25} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3695} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{2477} = \mathbf{PI}(24,0,24,0,1,0)_{7297} \\ \ell_{25} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3695} = \begin{bmatrix} 1 & 0 & 0$$

$$\begin{split} \ell_{31} &= \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{14} \end{bmatrix}_{3713} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{3713} = \mathbf{PI}(30,0,30,0,1,0)_{8065} \\ \ell_{32} &= \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{3201} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{3201} = \mathbf{PI}(31,0,31,0,1,0)_{8193} \\ \ell_{33} &= \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{58} \end{bmatrix}_{193} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{193} = \mathbf{PI}(32,0,32,0,1,0)_{8321} \\ \ell_{34} &= \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{3137} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{3137} = \mathbf{PI}(33,0,33,0,1,0)_{8449} \\ \ell_{35} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{1409} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{1409} = \mathbf{PI}(34,0,34,0,1,0)_{8577} \\ \ell_{36} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{2945} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{2945} = \mathbf{PI}(36,0,36,0,1,0)_{8933} \\ \ell_{38} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{705} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{705} = \mathbf{PI}(37,0,37,0,1,0)_{8961} \\ \ell_{39} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{897} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{705} = \mathbf{PI}(39,0,39,0,1,0)_{9217} \\ \ell_{41} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{1281} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{1281} = \mathbf{PI}(40,0,40,0,1,0)_{9345} \\ \ell_{42} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{1473} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{1473} = \mathbf{PI}(41,0,41,0,1,0)_{9473} \\ \ell_{43} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{1473} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{3393} = \mathbf{PI}(43,0,43,0,1,0)_{9229} \\ \ell_{45} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1089} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{3393} = \mathbf{PI}(44,0,44,0,1,0)_{9857} \\ \ell_{46} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1089} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1089} = \mathbf{PI}(44,0,44,0,1,0)_{9857} \\ \ell_{46} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{3393} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1089} = \mathbf{PI}(46,0,46,0,1,0)_{10113} \\ \ell_{48} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{3393} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{299} = \mathbf{PI}(48,0,48,0,1,0)_{10241} \\ \ell_{49} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{319} =$$

$$\begin{split} \ell_{52} &= \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3777} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{3777} = \mathbf{PI}(51,0,51,0,1,0)_{10753} \\ \ell_{53} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{3457} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 5^4 \end{bmatrix}_{3457} = \mathbf{PI}(52,0,52,0,1,0)_{10881} \\ \ell_{54} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{2753} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{2753} = \mathbf{PI}(53,0,53,0,1,0)_{11099} \\ \ell_{55} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{3329} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{3329} = \mathbf{PI}(54,0,54,0,1,0)_{11137} \\ \ell_{56} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{16} \end{bmatrix}_{2689} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{3649} = \mathbf{PI}(55,0,55,0,1,0)_{11265} \\ \ell_{57} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{3649} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{3649} = \mathbf{PI}(56,0,56,0,1,0)_{11393} \\ \ell_{58} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{3649} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{3585} = \mathbf{PI}(57,0,57,0,1,0)_{11521} \\ \ell_{59} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{32} \end{bmatrix}_{3625} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{3585} = \mathbf{PI}(59,0,59,0,1,0)_{11777} \\ \ell_{61} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1857} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{3265} = \mathbf{PI}(60,0,60,0,1,0)_{11905} \\ \ell_{62} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1153} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1857} = \mathbf{PI}(60,0,60,0,1,0)_{11905} \\ \ell_{64} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{1163} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1601} = \mathbf{PI}(62,0,62,0,1,0)_{12161} \\ \ell_{64} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{270464} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{321} = \mathbf{PI}(63,0,63,0,1,0)_{12289} \\ \ell_{65} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{270464} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{270469} = \mathbf{PI}(0,1,0,1,0,0)_{193} \\ \ell_{66} &= \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{266305} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{270459} = \mathbf{PI}(1,1,1,1,0,0)_{362} \\ \ell_{70} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3851729} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{12782593} = \mathbf{PI}(1,1,4,1,0,0)_{345} \\ \ell_{71} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{167$$

$$\begin{split} \ell_{73} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^4 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{4260865} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{4260865} = \mathbf{PI}(1,1,6,1,0,0)_{571} \\ \ell_{74} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{11933681} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{11933681} = \mathbf{PI}(1,1,7,1,0,0)_{634} \\ \ell_{75} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3195649} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3195649} = \mathbf{PI}(1,1,8,1,0,0)_{697} \\ \ell_{76} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{12516289} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{7190209} = \mathbf{PI}(1,1,9,1,0,0)_{760} \\ \ell_{77} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{9} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{12516289} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{12516289} = \mathbf{PI}(1,1,1,1,0,0)_{823} \\ \ell_{78} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{9853249} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{9853249} = \mathbf{PI}(1,1,1,1,0,0)_{849} \\ \ell_{89} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{6923905} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{310433} = \mathbf{PI}(1,1,1,1,1,0,0)_{1012} \\ \ell_{81} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{10119553} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{10119553} = \mathbf{PI}(1,1,1,1,1,0,0)_{1012} \\ \ell_{82} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{10119553} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{10119553} = \mathbf{PI}(1,1,1,1,1,0,0)_{1138} \\ \ell_{82} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{1597825} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{1597825} = \mathbf{PI}(1,1,1,1,1,0,0)_{1201} \\ \ell_{84} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{16244545} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{16244545} = \mathbf{PI}(1,1,1,1,1,0,0)_{1307} \\ \ell_{85} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{10385857} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{16244545} = \mathbf{PI}(1,1,2,1,0,0)_{1453} \\ \ell_{88} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3994561} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3894561} = \mathbf{PI}(1,1,2,1,0,0)_{1516} \\ \ell_{89} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{395437} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3994561} = \mathbf{PI}(1,1,24,1,0,0)_{1579} \\ \ell_{91} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{305437} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{30914565} = \mathbf{PI}(1,1,24,1,0,0$$

$$\begin{split} \ell_{04} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{2396737} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{2396737} = \mathbf{PI}(1,1,27,1,0,0)_{1894} \\ \ell_{95} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{5059777} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{5059777} = \mathbf{PI}(1,1,28,1,0,0)_{1957} \\ \ell_{96} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{15978241} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{15978241} = \mathbf{PI}(1,1,29,1,0,0)_{2020} \\ \ell_{97} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{15445633} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{15445633} = \mathbf{PI}(1,1,30,1,0,0)_{2030} \\ \ell_{99} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{13315201} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3315201} = \mathbf{PI}(1,1,31,1,0,0)_{2146} \\ \ell_{99} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{798913} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{798913} = \mathbf{PI}(1,1,33,1,0,0)_{2272} \\ \ell_{100} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3585699} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{33048897} = \mathbf{PI}(1,1,34,1,0,0)_{2335} \\ \ell_{102} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{10652161} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{10652161} = \mathbf{PI}(1,1,36,1,0,0)_{2461} \\ \ell_{104} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{22249885} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{22249855} = \mathbf{PI}(1,1,38,1,0,0)_{2524} \\ \ell_{105} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3728257} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3728257} = \mathbf{PI}(1,1,38,1,0,0)_{2587} \\ \ell_{106} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{32249985} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3228345} = \mathbf{PI}(1,1,38,1,0,0)_{2650} \\ \ell_{107} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3226641} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3226931} = \mathbf{PI}(1,1,41,1,0,0)_{2776} \\ \ell_{109} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{14466721} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{14114113} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{34527169} = \mathbf{PI}(1,1,44,1,0,0)_{2902} \\ \ell_{111} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{14646721} = \begin{bmatrix} 1 & 0 & 0 & 70 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3586030} = \mathbf{PI}(1,1,45,1,0,0)_{3028} \\ \ell_{112} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{18$$

$$\begin{split} \ell_{115} &= \begin{bmatrix} 1 & 0 & 0 & 0 & \epsilon \\ 0 & 1 & 1 & 0 \end{bmatrix}_{532609} = \begin{bmatrix} 1 & 0 & 0 & 0 & 2 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{532609} = \mathbf{PI}(1, 1, 48, 1, 0, 0)_{3217} \\ \ell_{116} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^6 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{8788033} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{8788033} = \mathbf{PI}(1, 1, 49, 1, 0, 0)_{3280} \\ \ell_{117} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{8256425} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{8255425} = \mathbf{PI}(1, 1, 50, 1, 0, 0)_{343} \\ \ell_{118} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{15711937} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{15711937} = \mathbf{PI}(1, 1, 51, 1, 0, 0)_{3466} \\ \ell_{119} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{14380417} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{14380417} = \mathbf{PI}(1, 1, 52, 1, 0, 0)_{3469} \\ \ell_{120} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{11451073} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{14380417} = \mathbf{PI}(1, 1, 53, 1, 0, 0)_{3532} \\ \ell_{121} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{13847809} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{13847809} = \mathbf{PI}(1, 1, 54, 1, 0, 0)_{3658} \\ \ell_{122} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{15179329} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{11184709} = \mathbf{PI}(1, 1, 56, 1, 0, 0)_{3721} \\ \ell_{124} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{14913025} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{14913025} = \mathbf{PI}(1, 1, 57, 1, 0, 0)_{3847} \\ \ell_{125} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3581505} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3581505} = \mathbf{PI}(1, 1, 59, 1, 0, 0)_{3910} \\ \ell_{127} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3581505} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3581505} = \mathbf{PI}(1, 1, 60, 1, 0, 0)_{3973} \\ \ell_{129} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3793473} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3793473} = \mathbf{PI}(1, 1, 60, 1, 0, 0)_{4099} \\ \ell_{130} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3734573} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3793473} = \mathbf{PI}(1, 1, 61, 1, 0, 0)_{4099} \\ \ell_{130} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & 0 \end{bmatrix}_{374625} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 0 \end{bmatrix}_{3794255} = \mathbf{PI}(1, 1, 1, 1, 1, 0)_{20417} \\ \ell_{132} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\$$

$$\begin{split} \ell_{136} &= \begin{bmatrix} 1 & 0 & 0 & e^{40} \\ 0 & 1 & 1 & e^{10} \end{bmatrix}_{18781185} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{16781185} = \mathbf{PI}(1,1,5,1,1,0)_{20606} \\ \ell_{137} &= \begin{bmatrix} 1 & 0 & 0 & e^{4} \\ 0 & 1 & 1 & e^{4} \end{bmatrix}_{4261889} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{168189} = \mathbf{PI}(1,1,6,1,1,0)_{20609} \\ \ell_{138} &= \begin{bmatrix} 1 & 0 & 0 & e^{40} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{11985561} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{11986561} = \mathbf{PI}(1,1,7,1,1,0)_{20732} \\ \ell_{139} &= \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{3196417} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{3196417} = \mathbf{PI}(1,1,8,1,1,0)_{20795} \\ \ell_{140} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{7191937} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{7191937} = \mathbf{PI}(1,1,9,1,1,0)_{20858} \\ \ell_{141} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{9855617} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{12519297} = \mathbf{PI}(1,1,11,1,1,0)_{20921} \\ \ell_{142} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{9855617} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{9855617} = \mathbf{PI}(1,1,12,1,1,0)_{21047} \\ \ell_{144} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{10121985} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{6925569} = \mathbf{PI}(1,1,13,1,1,0)_{21110} \\ \ell_{145} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{10121985} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{5593729} = \mathbf{PI}(1,1,16,1,1,0)_{21236} \\ \ell_{147} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{1021985} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{11720193} = \mathbf{PI}(1,1,18,1,1,0)_{21362} \\ \ell_{148} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{1798305} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{11720193} = \mathbf{PI}(1,1,18,1,1,0)_{21425} \\ \ell_{149} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{16248449} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{16248449} = \mathbf{PI}(1,1,18,1,1,0)_{21425} \\ \ell_{150} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{48} \end{bmatrix}_{3995521} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{3995521} = \mathbf{PI}(1,1,20,1,1,0)_{21614} \\ \ell_{153} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{48} \end{bmatrix}_{3995521} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{10388353} = \mathbf{PI}(1,1,23,1,1,0)_{21614} \\ \ell_{154} &$$

$$\begin{split} \ell_{157} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{31} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{3462785} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{3462785} = \mathbf{PI}(1,1,26,1,1,0)_{21929} \\ \ell_{158} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{5960993} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{2397313} = \mathbf{PI}(1,1,27,1,1,0)_{21992} \\ \ell_{159} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{5660993} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{5000993} = \mathbf{PI}(1,1,28,1,1,0)_{22055} \\ \ell_{160} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{15982081} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{15982081} = \mathbf{PI}(1,1,29,1,1,0)_{22118} \\ \ell_{161} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{15449345} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{15982081} = \mathbf{PI}(1,1,30,1,1,0)_{22181} \\ \ell_{162} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{13318401} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{33318401} = \mathbf{PI}(1,1,31,1,1,0)_{22244} \\ \ell_{163} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{799105} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{799105} = \mathbf{PI}(1,1,32,1,1,0)_{22307} \\ \ell_{164} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{3660097} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{13052033} = \mathbf{PI}(1,1,34,1,1,0)_{22433} \\ \ell_{166} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{3660097} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{10654721} = \mathbf{PI}(1,1,35,1,1,0)_{22496} \\ \ell_{167} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{2930049} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{2930049} = \mathbf{PI}(1,1,38,1,1,0)_{22622} \\ \ell_{169} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{2930049} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{3729153} = \mathbf{PI}(1,1,38,1,1,0)_{2262445} \\ \ell_{170} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{332281} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{5327361} = \mathbf{PI}(1,1,40,1,1,0)_{22674} \\ \ell_{171} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{14117505} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{6126452} = \mathbf{PI}(1,1,41,1,1,0)_{22937} \\ \ell_{174} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{14117505} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{14650241} = \mathbf{PI}(1,1,44,1,1,0)_{23006} \\ \ell_{175$$

$$\begin{split} \ell_{178} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{2663681} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{2663681} = \mathbf{PI}(1,1,47,1,1,0)_{23252} \\ \ell_{179} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon \\ 0 & 1 & 1 & \epsilon \end{bmatrix}_{322737} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{532737} = \mathbf{PI}(1,1,48,1,1,0)_{23315} \\ \ell_{180} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{8790145} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{8257409} = \mathbf{PI}(1,1,50,1,1,0)_{23378} \\ \ell_{181} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{8257409} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{15715713} = \mathbf{PI}(1,1,50,1,1,0)_{23504} \\ \ell_{183} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{14383873} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{14383873} = \mathbf{PI}(1,1,52,1,1,0)_{23567} \\ \ell_{184} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{11453825} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{13851137} = \mathbf{PI}(1,1,53,1,1,0)_{23693} \\ \ell_{185} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{13851137} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{11187457} = \mathbf{PI}(1,1,54,1,1,0)_{23693} \\ \ell_{187} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{13182977} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{11187457} = \mathbf{PI}(1,1,56,1,1,0)_{23882} \\ \ell_{189} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{15182977} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{15182977} = \mathbf{PI}(1,1,58,1,1,0)_{23882} \\ \ell_{189} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{7724673} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{14916009} = \mathbf{PI}(1,1,58,1,1,0)_{24071} \\ \ell_{192} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{7724673} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13584769} = \mathbf{PI}(1,1,50,1,1,0)_{24071} \\ \ell_{193} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{1331841} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13584769} = \mathbf{PI}(1,1,60,1,1,0)_{24071} \\ \ell_{194} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{3331841} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{1331841} = \mathbf{PI}(1,1,60,1,1,0)_{24197} \\ \ell_{194} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{3331841} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{12386480} = \mathbf{PI}(1,1,62,1,1,0)_{24197} \\ \ell_{194} &= \begin{bmatrix}$$

$$\begin{split} \ell_{199} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{6394399} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{6394399} = PI(2,48,2,48,1,0)_{206961} \\ \ell_{200} &= \begin{bmatrix} 1 & 0 & 0 & e^{10} \\ 0 & 1 & 1 & e^{11} \end{bmatrix}_{10779137} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{16779137} = PI(2,48,50,48,1,0)_{206965} \\ \ell_{201} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{5} \end{bmatrix}_{4262913} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{4262913} = PI(2,48,3,48,1,0)_{207024} \\ \ell_{202} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{11987457} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{11987457} = PI(2,48,51,48,1,0)_{207087} \\ \ell_{203} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{3197185} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{11987457} = PI(2,48,48,1,0)_{207087} \\ \ell_{204} &= \begin{bmatrix} 1 & 0 & 0 & e^{29} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{7193665} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{7193665} = PI(2,48,54,48,1,0)_{207111} \\ \ell_{205} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{41} \end{bmatrix}_{12520321} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{9856001} = PI(2,48,54,48,1,0)_{207151} \\ \ell_{206} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{2134157} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{2131457} = PI(2,48,54,48,1,0)_{207213} \\ \ell_{208} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{2134157} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{2131457} = PI(2,48,54,48,1,0)_{207213} \\ \ell_{209} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{21012433} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2131457} = PI(2,48,54,48,1,0)_{207273} \\ \ell_{210} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{210122333} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2132433} = PI(2,48,54,81,0)_{207339} \\ \ell_{211} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{10328363} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{11221023} = PI(2,48,54,81,0)_{207339} \\ \ell_{212} &= \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{1038865} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{10240273} = PI(2,48,54,81,0)_{207402} \\ \ell_{215} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{10388865} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{7460097} = PI(2,48,54,81,0)_{207402} \\ \ell_{215} &= \begin{bmatrix} 1$$

$$\begin{array}{l} \ell_{220} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{12}^{12} \\ 0 & 1 & 1 & \epsilon_{13}^{12} \end{bmatrix}_{16512705} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{16512705} = \mathbf{PI}(2,48,60,48,1,0)_{210615} \\ \ell_{221} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{13}^{32} \\ 0 & 1 & 1 & \epsilon_{23}^{32} \end{bmatrix}_{3463617} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{3403617} = \mathbf{PI}(2,48,13,48,1,0)_{207654} \\ \ell_{222} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{34} \\ 0 & 1 & 1 & \epsilon_{23}^{32} \end{bmatrix}_{2397889} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{2397889} = \mathbf{PI}(2,48,61,48,1,0)_{210678} \\ \ell_{223} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{32} \\ 0 & 1 & 1 & \epsilon_{23}^{32} \end{bmatrix}_{5062209} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1597841} = \mathbf{PI}(2,48,62,48,1,0)_{210741} \\ \ell_{224} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{50} \\ 0 & 1 & 1 & \epsilon_{14}^{51} \end{bmatrix}_{1597841} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1597841} = \mathbf{PI}(2,48,62,48,1,0)_{210741} \\ \ell_{225} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{50} \\ 0 & 1 & 1 & \epsilon_{24}^{50} \end{bmatrix}_{13315521} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13315521} = \mathbf{PI}(2,48,63,48,1,0)_{20780} \\ \ell_{226} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{50} \\ 0 & 1 & 1 & \epsilon_{24}^{50} \end{bmatrix}_{13315521} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13315521} = \mathbf{PI}(2,48,63,48,1,0)_{207843} \\ \ell_{227} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{50} \\ 0 & 1 & 1 & \epsilon_{24}^{50} \end{bmatrix}_{13049089} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{13049089} = \mathbf{PI}(2,48,32,48,1,0)_{208851} \\ \ell_{229} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{50} \\ 0 & 1 & 1 & \epsilon_{24}^{50} \end{bmatrix}_{10655297} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{10655297} = \mathbf{PI}(2,48,14,48,1,0)_{208044} \\ \ell_{231} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{50} \\ 0 & 1 & 1 & \epsilon_{14}^{50} \end{bmatrix}_{2930753} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{10655297} = \mathbf{PI}(2,48,34,48,1,0)_{208097} \\ \ell_{232} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{24}^{50} \\ 0 & 1 & 1 & \epsilon_{14}^{50} \end{bmatrix}_{2930753} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{2930753} = \mathbf{PI}(2,48,34,48,1,0)_{208092} \\ \ell_{233} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{14}^{50} \\ 0 & 1 & 1 & \epsilon_{14}^{50} \end{bmatrix}_{2930753} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{2930753} = \mathbf{PI}(2,48,34,48,1,0)_{208092} \\ \ell_{234} = \begin{bmatrix} 1 & 0 & 0 & \epsilon_{14}^{50} \\ 0 & 1 & 1 & \epsilon_{14}^{50} \end{bmatrix}_{373049} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{2930753} = \mathbf{PI}(2,48,34,48,1,0)_{20$$

$$\begin{split} \ell_{241} &= \begin{bmatrix} 1 & 0 & 0 & e^{3\delta} \\ 0 & 1 & 1 & e^{2\delta} \end{bmatrix}_{0589569} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{9589569} = \text{PI}(2,48,23,48,1,0)_{208284} \\ \ell_{242} &= \begin{bmatrix} 1 & 0 & 0 & e^{5\delta} \\ 0 & 1 & 1 & e^{5\delta} \end{bmatrix}_{2664321} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{2664321} = \text{PI}(2,48,39,48,1,0)_{208347} \\ \ell_{243} &= \begin{bmatrix} 1 & 0 & 0 & e^{\delta} \\ 0 & 1 & 1 & e^{\delta} \end{bmatrix}_{532865} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{532865} = \text{PI}(2,48,24,48,1,0)_{208347} \\ \ell_{244} &= \begin{bmatrix} 1 & 0 & 0 & e^{\delta} \\ 0 & 1 & 1 & e^{\delta} \end{bmatrix}_{8290273} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{8790273} = \text{PI}(2,48,40,48,1,0)_{208347} \\ \ell_{245} &= \begin{bmatrix} 1 & 0 & 0 & e^{5\delta} \\ 0 & 1 & 1 & e^{\delta\delta} \end{bmatrix}_{15713409} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{15713409} = \text{PI}(2,48,25,48,1,0)_{208410} \\ \ell_{246} &= \begin{bmatrix} 1 & 0 & 0 & e^{3\delta} \\ 0 & 1 & 1 & e^{3\delta} \end{bmatrix}_{14381249} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{14381249} = \text{PI}(2,48,26,48,1,0)_{208473} \\ \ell_{248} &= \begin{bmatrix} 1 & 0 & 0 & e^{3\delta} \\ 0 & 1 & 1 & e^{3\delta} \end{bmatrix}_{14381349} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{11454593} = \text{PI}(2,48,42,48,1,0)_{208481} \\ \ell_{249} &= \begin{bmatrix} 1 & 0 & 0 & e^{3\delta} \\ 0 & 1 & 1 & e^{3\delta} \end{bmatrix}_{13848385} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{13848385} = \text{PI}(2,48,42,48,1,0)_{208596} \\ \ell_{250} &= \begin{bmatrix} 1 & 0 & 0 & e^{2\delta} \\ 0 & 1 & 1 & e^{2\delta} \end{bmatrix}_{1188161} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{13848355} = \text{PI}(2,48,43,48,1,0)_{208596} \\ \ell_{252} &= \begin{bmatrix} 1 & 0 & 0 & e^{2\delta} \\ 0 & 1 & 1 & e^{2\delta} \end{bmatrix}_{13892961} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{13818161} = \text{PI}(2,48,43,48,1,0)_{208662} \\ \ell_{252} &= \begin{bmatrix} 1 & 0 & 0 & e^{2\delta} \\ 0 & 1 & 1 & e^{2\delta} \end{bmatrix}_{13892961} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{14914113} = \text{PI}(2,48,44,48,1,0)_{208677} \\ \ell_{255} &= \begin{bmatrix} 1 & 0 & 0 & e^{2\delta} \\ 0 & 1 & 1 & e^{2\delta} \end{bmatrix}_{13581953} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{130819353} = \text{PI}(2,48,46,48,1,0)_{208677} \\ \ell_{256} &= \begin{bmatrix} 1 & 0 & 0 & e^{3\delta} \\ 0 & 1 & 1 & e^{2\delta} \end{bmatrix}_{13581953} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{7726529} = \text{PI}(2,48,46,48,1,0)_{208778} \\ \ell_{256} &= \begin{bmatrix} 1 & 0 & 0 & e^{3\delta} \\ 0 & 1 & 1 & e^{2\delta} \end{bmatrix}_{1332161} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{4785777$$

$$\begin{split} &\ell_{262} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^5 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{8521793} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{8521793} = \mathbf{PI}(3, 32, 1, 32, 1, 0)_{143395} \\ &\ell_{263} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{6393857} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{16779201} = \mathbf{PI}(3, 32, 35, 32, 1, 0)_{145537} \\ &\ell_{264} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{16779201} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{16779201} = \mathbf{PI}(3, 32, 33, 32, 1, 0)_{143521} \\ &\ell_{265} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{11985089} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{11985089} = \mathbf{PI}(3, 32, 32, 32, 1, 0)_{145474} \\ &\ell_{267} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{3196929} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{3196929} = \mathbf{PI}(3, 32, 33, 32, 1, 0)_{14578} \\ &\ell_{268} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{7193089} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{7193089} = \mathbf{PI}(3, 32, 32, 32, 1, 0)_{14579} \\ &\ell_{269} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{12517313} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{12517313} = \mathbf{PI}(3, 32, 36, 32, 1, 0)_{145726} \\ &\ell_{270} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{9854145} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{9854145} = \mathbf{PI}(3, 32, 36, 32, 1, 0)_{145726} \\ &\ell_{271} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1020257} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{9854145} = \mathbf{PI}(3, 32, 36, 32, 1, 0)_{145603} \\ &\ell_{273} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{15198657} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10120257} = \mathbf{PI}(3, 32, 36, 32, 1, 0)_{145663} \\ &\ell_{275} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{15198657} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{1598455} = \mathbf{PI}(3, 32, 47, 32, 1, 0)_{146293} \\ &\ell_{275} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{15178721} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{15198557} = \mathbf{PI}(3, 32, 47, 32, 1, 0)_{146293} \\ &\ell_{276} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{15178721} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 1 & 3 \end{bmatrix}_{16246977} = \mathbf{PI}(3, 32, 47, 32, 1, 0)_{144277} \\ &\ell_{277} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}$$

$$\begin{split} \ell_{283} &= \begin{bmatrix} 1 & 0 & 0 & 0 & c^2 \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{1065985} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{1065985} = PI(3, 32, 8, 32, 1, 0)_{143836} \\ \ell_{284} &= \begin{bmatrix} 1 & 0 & 0 & e^{17} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{10513089} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{16513089} = PI(3, 32, 40, 32, 1, 0)_{145852} \\ \ell_{285} &= \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{3463425} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{3493455} = PI(3, 32, 41, 32, 1, 0)_{145915} \\ \ell_{286} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{17} \end{bmatrix}_{5063169} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{3493425} = PI(3, 32, 9, 32, 1, 0)_{146041} \\ \ell_{287} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{17} \end{bmatrix}_{5063169} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{5063169} = PI(3, 32, 43, 32, 1, 0)_{146041} \\ \ell_{288} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{15980699} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{15980699} = PI(3, 32, 11, 32, 1, 0)_{144025} \\ \ell_{299} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{15448641} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{13318721} = PI(3, 32, 10, 32, 1, 0)_{145078} \\ \ell_{291} &= \begin{bmatrix} 1 & 0 & 0 & e^{58} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{799233} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{13318721} = PI(3, 32, 42, 32, 1, 0)_{145078} \\ \ell_{293} &= \begin{bmatrix} 1 & 0 & 0 & e^{58} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{799233} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{3052097} = PI(3, 32, 30, 32, 1, 0)_{147238} \\ \ell_{294} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{10653761} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{10653761} = PI(3, 32, 62, 32, 1, 0)_{147238} \\ \ell_{294} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{10653761} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{2231201} = PI(3, 32, 60, 32, 1, 0)_{147238} \\ \ell_{295} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{3231201} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{2251201} = PI(3, 32, 60, 32, 1, 0)_{147218} \\ \ell_{299} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3231201} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{2231201} = PI(3, 32, 29, 32, 1, 0)_{1451844} \\ \ell_{299} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{31286409} = \begin{bmatrix} 1 & 0 & 0$$

$$\begin{split} \ell_{304} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{1864705} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{1864705} = PI(3, 32, 27, 32, 1, 0)_{145033} \\ \ell_{305} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{9587777} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 1 & 0 & 0 & 1 & 1 & 13 \end{bmatrix}_{9587777} \\ \ell_{306} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{2664961} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{2664961} = PI(3, 32, 26, 32, 1, 0)_{146986} \\ \ell_{307} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{5} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{326993} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{3789161} = PI(3, 32, 16, 32, 1, 0)_{144340} \\ \ell_{308} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{8789161} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{3789161} = PI(3, 32, 48, 32, 1, 0)_{146356} \\ \ell_{309} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{8257537} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{3257537} = PI(3, 32, 49, 32, 1, 0)_{146419} \\ \ell_{310} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{15714753} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{15714753} = PI(3, 32, 17, 32, 1, 0)_{146545} \\ \ell_{311} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{14384193} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{14384193} = PI(3, 32, 19, 32, 1, 0)_{146545} \\ \ell_{312} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{13851713} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 6^{25} \end{bmatrix}_{13851713} = PI(3, 32, 19, 32, 1, 0)_{144529} \\ \ell_{313} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{131851713} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{11186753} = PI(3, 32, 50, 32, 1, 0)_{144781} \\ \ell_{315} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{14015649} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{14015649} = PI(3, 32, 23, 32, 1, 0)_{144781} \\ \ell_{316} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{7991297} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{7991297} = PI(3, 32, 20, 32, 1, 0)_{144781} \\ \ell_{319} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{799299} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{4796929} = PI(3, 32, 52, 32, 1, 0)_{144665} \\ \ell_{322} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{1332481} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{1332481} = PI$$

$$\begin{split} \ell_{325} &= \begin{bmatrix} 1 & 0 & 0 & 0 & 1 \\ 0 & 1 & 1 & e^2 \end{bmatrix}_{266561} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{266561} = \mathbf{PI}(4, 24, 24, 24, 1, 0)_{113093} \\ \ell_{326} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^7 \end{bmatrix}_{12782721} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{12782721} = \mathbf{PI}(4, 24, 48, 24, 1, 0)_{114005} \\ \ell_{327} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^7 \end{bmatrix}_{8523600} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{8523600} = \mathbf{PI}(4, 24, 40, 24, 1, 0)_{114101} \\ \ell_{328} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{6391361} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{6391361} = \mathbf{PI}(4, 24, 1, 24, 1, 0)_{11468} \\ \ell_{329} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{1085153} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{11985153} = \mathbf{PI}(4, 24, 49, 24, 1, 0)_{11468} \\ \ell_{330} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{3198721} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{7191041} = \mathbf{PI}(4, 24, 22, 24, 1, 0)_{114704} \\ \ell_{332} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{3198721} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{7191041} = \mathbf{PI}(4, 24, 26, 24, 1, 0)_{114731} \\ \ell_{333} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{12518273} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{7191041} = \mathbf{PI}(4, 24, 26, 24, 1, 0)_{114731} \\ \ell_{334} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{3886769} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{2132481} = \mathbf{PI}(4, 24, 3, 24, 1, 0)_{114770} \\ \ell_{336} &= \begin{bmatrix} 1 & 0 & 0 & e^{32} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{6924481} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{6924481} = \mathbf{PI}(4, 24, 24, 24, 1, 0)_{114794} \\ \ell_{338} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{10123329} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{6924481} = \mathbf{PI}(4, 24, 3, 24, 1, 0)_{114794} \\ \ell_{339} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{1599361} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{1599361} = \mathbf{PI}(4, 24, 24, 24, 1, 0)_{114200} \\ \ell_{341} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{16248001} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{11718593} = \mathbf{PI}(4, 24, 24, 24, 1, 0)_{114857} \\ \ell_{342} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{10389889} = \begin{bmatrix} 1 &$$

$$\begin{split} \ell_{346} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{37} \\ 0 & 1 & 1 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{10918913} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 7 \\ 1 & 10918913} = \mathbf{PI}(4, 24, 45, 24, 1, 0)_{114416} \\ \ell_{347} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{2} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{1066241} &= \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{10918913} = \mathbf{PI}(4, 24, 6, 24, 1, 0)_{113471} \\ \ell_{348} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3465281} &= \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{16514561} &= \mathbf{PI}(4, 24, 30, 24, 1, 0)_{113471} \\ \ell_{349} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3465281} &= \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{3465281} &= \mathbf{PI}(4, 24, 54, 24, 1, 0)_{114479} \\ \ell_{351} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{5062657} &= \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2399041} &= \mathbf{PI}(4, 24, 46, 24, 1, 0)_{114479} \\ \ell_{352} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{5062657} &= \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{5062657} &= \mathbf{PI}(4, 24, 7, 24, 1, 0)_{112022} \\ \ell_{352} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{15448321} &= \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{15981441} &= \mathbf{PI}(4, 24, 31, 24, 1, 0)_{113548} \\ \ell_{353} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{13315841} &= \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{13315841} &= \mathbf{PI}(4, 24, 47, 24, 1, 0)_{114542} \\ \ell_{354} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{69} \end{bmatrix}_{799681} &= \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{13315841} &= \mathbf{PI}(4, 24, 47, 24, 1, 0)_{112569} \\ \ell_{356} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{13049281} &= \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{13049281} &= \mathbf{PI}(4, 24, 56, 24, 1, 0)_{112589} \\ \ell_{357} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{12251713} &= \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{12251713} &= \mathbf{PI}(4, 24, 56, 24, 1, 0)_{112589} \\ \ell_{359} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{12251713} &= \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{12251713} &= \mathbf{PI}(4, 24, 57, 24, 1, 0)_{112148} \\ \ell_{360} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{2932161} &= \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{2932161} &= \mathbf{PI}(4, 24, 57, 24, 1, 0)_{$$

$$\begin{split} &\ell_{367} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{4529537} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{4529537} = \mathbf{PI}(4,24,11,24,1,0)_{112274} \\ &\ell_{368} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{1865921} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{365921} = \mathbf{PI}(4,24,19,24,1,0)_{112778} \\ &\ell_{369} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{9500299} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{9500299} = \mathbf{PI}(4,24,59,24,1,0)_{115298} \\ &\ell_{370} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{2665601} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{2665601} = \mathbf{PI}(4,24,35,24,1,0)_{112378} \\ &\ell_{371} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{8} \end{bmatrix}_{533121} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{533121} = \mathbf{PI}(4,24,12,24,1,0)_{112347} \\ &\ell_{372} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{3257281} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{8790529} = \mathbf{PI}(4,24,20,24,1,0)_{112341} \\ &\ell_{373} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{3257281} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{8257281} = \mathbf{PI}(4,24,36,24,1,0)_{113849} \\ &\ell_{374} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{13714881} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{13714881} = \mathbf{PI}(4,24,36,24,1,0)_{113849} \\ &\ell_{375} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{14382031} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{14382031} = \mathbf{PI}(4,24,31,24,1,0)_{112400} \\ &\ell_{376} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{11352033} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{13848961} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{13848961} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{13848961} = \mathbf{PI}(4,24,37,24,1,0)_{112904} \\ &\ell_{376} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{13185761} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{13185761} = \mathbf{PI}(4,24,22,24,1,0)_{112967} \\ &\ell_{380} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1518761} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{14915201} = \mathbf{PI}(4,24,38,24,1,0)_{112967} \\ &\ell_{381} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{7790721} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{7790721} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{$$

$$\begin{split} \ell_{388} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{6392897} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{6392897} = \mathbf{PI}(5, 63, 62, 63, 1, 0)_{270279} \\ \ell_{389} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{266625} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{266625} = \mathbf{PI}(5, 63, 63, 63, 1, 0)_{270342} \\ \ell_{390} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{12785793} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{12785793} = \mathbf{PI}(5, 63, 31, 63, 1, 0)_{268326} \\ \ell_{391} &= \begin{bmatrix} 1 & 0 & 0 & e^{65} \\ 0 & 1 & 1 & e^{58} \end{bmatrix}_{8521921} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{8521921} = \mathbf{PI}(5, 63, 32, 63, 1, 0)_{268389} \\ \ell_{392} &= \begin{bmatrix} 1 & 0 & 0 & e^{65} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{16777217} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{16777217} = \mathbf{PI}(5, 63, 33, 63, 1, 0)_{268436} \\ \ell_{393} &= \begin{bmatrix} 1 & 0 & 0 & e^{64} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{264001} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{16777217} = \mathbf{PI}(5, 63, 33, 63, 1, 0)_{268452} \\ \ell_{394} &= \begin{bmatrix} 1 & 0 & 0 & e^{64} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{3199489} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{11987393} = \mathbf{PI}(5, 63, 30, 63, 1, 0)_{268200} \\ \ell_{396} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{3199489} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{3199489} = \mathbf{PI}(5, 63, 29, 63, 1, 0)_{268200} \\ \ell_{396} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{12519361} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{12519361} = \mathbf{PI}(5, 63, 26, 31, 0)_{266499} \\ \ell_{399} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{2132993} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{9854401} = \mathbf{PI}(5, 63, 36, 63, 1, 0)_{268578} \\ \ell_{400} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{2132993} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 & 8 \end{bmatrix}_{9854401} = \mathbf{PI}(5, 63, 36, 63, 1, 0)_{268578} \\ \ell_{401} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{2132993} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 1 & 8 \end{bmatrix}_{9854401} = \mathbf{PI}(5, 63, 36, 31, 0)_{268578} \\ \ell_{402} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{2132993} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 1 & 9 \end{bmatrix}_{2121499} = \mathbf{PI}(5, 63, 36, 31, 0)_{266622} \\ \ell_{403} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{5$$

$$\begin{split} &\ell_{4109} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{9054913} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{9054913} = \mathbf{PI}(5,63,27,63,1,0)_{268014} \\ &\ell_{411} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{10021409} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{1006497} = \mathbf{PI}(5,63,36,63,1,0)_{268830} \\ &\ell_{412} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{16611105} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{1066497} = \mathbf{PI}(5,63,39,63,1,0)_{268830} \\ &\ell_{412} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{16511105} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{16511105} = \mathbf{PI}(5,63,24,63,1,0)_{267855} \\ &\ell_{413} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{3465601} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{3465601} = \mathbf{PI}(5,63,56,63,1,0)_{269901} \\ &\ell_{414} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{2399617} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2399617} = \mathbf{PI}(5,63,7,63,1,0)_{266814} \\ &\ell_{415} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{15979137} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{15979137} = \mathbf{PI}(5,63,38,63,1,0)_{268767} \\ &\ell_{416} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{15446657} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{15446657} = \mathbf{PI}(5,63,63,63,1,0)_{267671} \\ &\ell_{419} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{13318785} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{13052417} = \mathbf{PI}(5,63,21,63,1,0)_{2670996} \\ &\ell_{420} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{13052417} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{13052417} = \mathbf{PI}(5,63,42,63,1,0)_{267003} \\ &\ell_{422} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{10654913} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{10654913} = \mathbf{PI}(5,63,43,63,1,0)_{267033} \\ &\ell_{423} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{10654913} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{10654913} = \mathbf{PI}(5,63,43,63,1,0)_{2670333} \\ &\ell_{424} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{3731713} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{2931841} = \mathbf{PI}(5,63,43,63,1,0)_{2676333377} \\ &\ell_{425} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{3731713} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0$$

$$\begin{array}{l} \ell_{430} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{7} \end{bmatrix}_{14110353} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{14110353} = \mathbf{PI}(5,63,40,63,1,0)_{268893} \\ \ell_{431} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1850847} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 72 \end{bmatrix}_{1530497} = \mathbf{PI}(5,63,54,63,1,0)_{266940} \\ \ell_{432} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1865857} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 72 \end{bmatrix}_{1865857} = \mathbf{PI}(5,63,9,63,1,0)_{266940} \\ \ell_{433} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{0588417} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{2665217} = \mathbf{PI}(5,63,41,63,1,0)_{266940} \\ \ell_{434} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{2665217} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{2665217} = \mathbf{PI}(5,63,47,63,1,0)_{267759} \\ \ell_{435} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{533249} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{533249} = \mathbf{PI}(5,63,47,63,1,0)_{260334} \\ \ell_{436} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{8255553} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{8255553} = \mathbf{PI}(5,63,48,63,1,0)_{269307} \\ \ell_{437} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{15713281} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{15713281} = \mathbf{PI}(5,63,48,63,1,0)_{269307} \\ \ell_{438} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{14383333} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{14383333} = \mathbf{PI}(5,63,46,63,1,0)_{267444} \\ \ell_{440} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{11453377} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{11453377} = \mathbf{PI}(5,63,46,63,1,0)_{269271} \\ \ell_{441} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{11453377} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{13850241} = \mathbf{PI}(5,63,46,63,1,0)_{269275} \\ \ell_{442} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{14914689} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{15181313} = \mathbf{PI}(5,63,45,63,1,0)_{269208} \\ \ell_{444} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{14914689} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{1398569} = \mathbf{PI}(5,63,45,63,1,0)_{269208} \\ \ell_{445} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{13585409} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13585409} = \mathbf{PI}(5,$$

$$\begin{split} \ell_{451} &= \begin{bmatrix} 1 & \epsilon^4 & \epsilon^4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4331600} = \begin{bmatrix} 1 & 16 & 16 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4331600} = \mathbf{PI}(0,16,0,16,1,0)_{14337} \\ \ell_{452} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{11986497} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{11986497} = \mathbf{PI}(6,16,17,16,1,0)_{80802} \\ \ell_{453} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{02} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{266689} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{366899} = \mathbf{PI}(6,16,16,16,16,1,0)_{80803} \\ \ell_{454} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{02} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{12782785} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{12782785} = \mathbf{PI}(6,16,32,16,1,0)_{81847} \\ \ell_{455} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{8521857} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{32782785} = \mathbf{PI}(6,16,48,16,1,0)_{82855} \\ \ell_{456} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{6394433} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{6394433} = \mathbf{PI}(6,16,48,16,1,0)_{82918} \\ \ell_{457} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & 4 \end{bmatrix}_{4260929} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{4260929} = \mathbf{PI}(6,16,49,16,1,0)_{82918} \\ \ell_{459} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{3198209} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{3198209} = \mathbf{PI}(6,16,5,16,1,0)_{82036} \\ \ell_{461} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{7193885} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{12518337} = \mathbf{PI}(6,16,3,16,1,0)_{80020} \\ \ell_{462} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{9855041} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{9855041} = \mathbf{PI}(6,16,1,16,1,0)_{80020} \\ \ell_{464} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{10120061} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{10120061} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{10120061} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{10120061} = \mathbf{PI}(6,16,5,16,1,0)_{82298} \\ \ell_{467} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{10120061} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{10120061} = \mathbf{PI}(6,16,5,16,1,0)_{82298} \\ \ell_{468} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{10120061} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 2^{13} \end{bmatrix}_{10120061} = \mathbf{PI}(6,16,5,16,1,0)_{82298} \\ \ell_{469} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23}$$

$$\begin{split} \ell_{472} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{3996737} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{3996737} = \mathbf{PI}(6, 16, 22, 16, 1, 0)_{81217} \\ \ell_{473} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{9055233} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{9055233} = \mathbf{PI}(6, 16, 38, 16, 1, 0)_{82225} \\ \ell_{474} &= \begin{bmatrix} 1 & 0 & 0 & e^{37} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{10921793} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{10921793} = \mathbf{PI}(6, 16, 54, 16, 1, 0)_{83233} \\ \ell_{475} &= \begin{bmatrix} 1 & 0 & 0 & e^{12} \\ 0 & 1 & 1 & e^{61} \end{bmatrix}_{1066753} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{1066753} = \mathbf{PI}(6, 16, 41, 16, 1, 0)_{80083} \\ \ell_{476} &= \begin{bmatrix} 1 & 0 & 0 & e^{12} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{16513345} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{16513345} = \mathbf{PI}(6, 16, 20, 16, 1, 0)_{81091} \\ \ell_{477} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{3464897} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{3469897} = \mathbf{PI}(6, 16, 36, 16, 1, 0)_{82099} \\ \ell_{478} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{5060481} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{5060481} = \mathbf{PI}(6, 16, 52, 16, 1, 0)_{81107} \\ \ell_{480} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{15980993} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{15980993} = \mathbf{PI}(6, 16, 53, 16, 1, 0)_{81170} \\ \ell_{481} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{13316161} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{13316161} = \mathbf{PI}(6, 16, 21, 16, 1, 0)_{81164} \\ \ell_{483} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{13049217} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{13449665} = \mathbf{PI}(6, 16, 47, 16, 1, 0)_{82792} \\ \ell_{484} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{13049217} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13049217} = \mathbf{PI}(6, 16, 16, 16, 16, 10, 10, 10)_{8794} \\ \ell_{485} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{13049217} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13049217} = \mathbf{PI}(6, 16, 16, 16, 16, 10, 10, 10)_{8794} \\ \ell_{485} &= \begin{bmatrix} 1 & 0 & 0 & e^{65} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{13049217} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13049217} = \mathbf{PI}(6, 16, 16, 16, 10, 10, 10)_{8794} \\ \ell_{488} &= \begin{bmatrix} 1 & 0 & 0 & e^{65}$$

$$\ell_{493} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{43} \\ 0 & 1 & 1 & e^{13} \\ \end{bmatrix}_{14617809} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 17 \\ \end{bmatrix}_{14617809} = \mathbf{PI}(6, 16, 44, 16, 1, 0)_{82003}$$

$$\ell_{494} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{13} \\ \end{bmatrix}_{14115969} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 29 \\ \end{bmatrix}_{14115969} = \mathbf{PI}(6, 16, 60, 16, 1, 0)_{83611}$$

$$\ell_{495} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{33} \\ \end{bmatrix}_{1457617} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 7 \\ \end{bmatrix}_{4527617} = \mathbf{PI}(6, 16, 45, 16, 1, 0)_{82666}$$

$$\ell_{196} = \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{33} \\ \end{bmatrix}_{1865281} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 18 \\ \end{bmatrix}_{1865281} = \mathbf{PI}(6, 16, 61, 16, 1, 0)_{83674}$$

$$\ell_{497} = \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{53} \\ \end{bmatrix}_{958609} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & e^{53} \\ \end{bmatrix}_{958609} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & e^{53} \\ \end{bmatrix}_{3685809} = \mathbf{PI}(6, 16, 29, 16, 1, 0)_{81658}$$

$$\ell_{499} = \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{23} \\ \end{bmatrix}_{3788289} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & e^{23} \\ \end{bmatrix}_{3788289} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 2 \\ \end{bmatrix}_{533377} = \mathbf{PI}(6, 16, 24, 16, 1, 0)_{81343}$$

$$\ell_{501} = \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{23} \\ \end{bmatrix}_{3785289} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 3 \\ \end{bmatrix}_{8257665} = \mathbf{PI}(6, 16, 40, 16, 1, 0)_{82351}$$

$$\ell_{502} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{23} \\ \end{bmatrix}_{14381889} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 2^{23} \\ \end{bmatrix}_{14381889} = \mathbf{PI}(6, 16, 57, 16, 1, 0)_{83422}$$

$$\ell_{504} = \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{23} \\ \end{bmatrix}_{14381889} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 2^{23} \\ \end{bmatrix}_{14381889} = \mathbf{PI}(6, 16, 25, 16, 1, 0)_{83422}$$

$$\ell_{506} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{23} \\ \end{bmatrix}_{13849537} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 5^{23} \\ \end{bmatrix}_{14381893} = \mathbf{PI}(6, 16, 25, 16, 1, 0)_{83422}$$

$$\ell_{506} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{23} \\ \end{bmatrix}_{13849537} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 5^{23} \\ \end{bmatrix}_{143190289} = \mathbf{PI}(6, 16, 25, 16, 1, 0)_{83422}$$

$$\ell_{509} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{43} \\ \end{bmatrix}_{14910289} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 5^{23} \\ \end{bmatrix}_{14910289} = \mathbf{PI}(6, 16, 27, 16, 1, 0)_{83524}$$

$$\begin{split} \ell_{514} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{1333441} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{1333441} = \mathbf{PI}(6, 16, 58, 16, 1, 0)_{83485} \\ \ell_{515} &= \begin{bmatrix} 1 & \epsilon^{24} & \epsilon^{24} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12175085} = \begin{bmatrix} 1 & 45 & 45 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12175085} = \mathbf{PI}(0, 45, 0, 45, 1, 0)_{18049} \\ \ell_{516} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^4 \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{12175085} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{266753} = \mathbf{PI}(7, 45, 44, 45, 1, 0)_{197705} \\ \ell_{517} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{266753} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{12785857} = \mathbf{PI}(7, 45, 59, 45, 1, 0)_{19768} \\ \ell_{519} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{8823905} &= \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{8523905} &= \mathbf{PI}(7, 45, 59, 45, 1, 0)_{196319} \\ \ell_{520} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{16779073} &= \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{16779073} &= \mathbf{PI}(7, 45, 58, 45, 1, 0)_{198387} \\ \ell_{522} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{11983745} &= \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{11983745} &= \mathbf{PI}(7, 45, 1, 45, 1, 0)_{194396} \\ \ell_{524} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{69} \end{bmatrix}_{3197953} &= \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{7192257} &= \mathbf{PI}(7, 45, 56, 45, 1, 0)_{196322} \\ \ell_{525} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{69} \\ 0 & 1 & 1 & \epsilon^{69} \end{bmatrix}_{3197953} &= \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{7192257} &= \mathbf{PI}(7, 45, 56, 45, 1, 0)_{196322} \\ \ell_{525} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{69} \\ 0 & 1 & 1 & \epsilon^{69} \end{bmatrix}_{3197953} &= \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{7192257} &= \mathbf{PI}(7, 45, 56, 45, 1, 0)_{196324} \\ \ell_{526} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{32517249} &= \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{12517249} &= \mathbf{PI}(7, 45, 56, 45, 1, 0)_{196324} \\ \ell_{526} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3056897} &= \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{32517249} &= \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{32517249} &= \mathbf{PI}(7, 45, 56, 45, 1, 0)_{196324} \\ \ell_{526} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3056997} &= \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{30926401} &= \mathbf{PI}(7, 45, 56, 45, 1, 0)_{196$$

$$\ell_{535} = \begin{bmatrix} 1 & 0 & 0 & 0 & \epsilon^8 \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{10389377} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{10389377} = \mathbf{PI}(7, 45, 42, 45, 1, 0)_{197579}$$

$$\ell_{536} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{3997441} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{3997441} = \mathbf{PI}(7, 45, 7, 45, 1, 0)_{196374}$$

$$\ell_{537} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{9057153} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{9057153} = \mathbf{PI}(7, 45, 17, 45, 1, 0)_{196004}$$

$$\ell_{538} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{37} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{1067009} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{10620321} = \mathbf{PI}(7, 45, 60, 45, 1, 0)_{198713}$$

$$\ell_{540} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{16512449} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{1067009} = \mathbf{PI}(7, 45, 62, 45, 1, 0)_{198839}$$

$$\ell_{541} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{31} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{16512449} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{16512449} = \mathbf{PI}(7, 45, 62, 45, 1, 0)_{198839}$$

$$\ell_{542} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{31} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{3464193} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{2400769} = \mathbf{PI}(7, 45, 40, 45, 1, 0)_{195248}$$

$$\ell_{543} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{5061313} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{5061313} = \mathbf{PI}(7, 45, 45, 45, 1, 0)_{195185}$$

$$\ell_{544} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{5061313} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{5061313} = \mathbf{PI}(7, 45, 45, 45, 1, 0)_{195185}$$

$$\ell_{545} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{15979713} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{15979713} = \mathbf{PI}(7, 45, 45, 45, 1, 0)_{195304}$$

$$\ell_{546} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{15445953} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{15345953} = \mathbf{PI}(7, 45, 63, 45, 1, 0)_{196067}$$

$$\ell_{547} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{106532225} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{1339105} = \mathbf{PI}(7, 45, 54, 45, 1, 0)_{19634}$$

$$\ell_{548} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{12052254} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13052225} = \mathbf{PI}(7, 45, 54, 45, 1, 0)_{196335}$$

$$\ell_{550} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56}$$

$$\begin{split} \ell_{556} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{2} \end{bmatrix}_{6125249} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{6125249} = PI(7, 45, 24, 45, 1, 0)_{196445} \\ \ell_{557} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{14649153} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{1440153} = PI(7, 45, 14, 45, 1, 0)_{195815} \\ \ell_{558} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14116673} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{14116673} = PI(7, 45, 35, 45, 1, 0)_{197138} \\ \ell_{559} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{4528577} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{4528577} = PI(7, 45, 34, 45, 1, 0)_{197055} \\ \ell_{560} &= \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{3696497} = \begin{bmatrix} 1 & 0 & 0 & 72 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{9590913} = PI(7, 45, 15, 45, 1, 0)_{196508} \\ \ell_{562} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{49} \end{bmatrix}_{533506} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{533505} = PI(7, 45, 52, 45, 1, 0)_{196209} \\ \ell_{564} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{533506} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{8790401} = PI(7, 45, 14, 45, 1, 0)_{195227} \\ \ell_{564} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{8790401} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{8790401} = PI(7, 45, 48, 45, 1, 0)_{19526} \\ \ell_{565} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{8790401} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{15712065} = PI(7, 45, 48, 45, 1, 0)_{195057} \\ \ell_{566} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14382529} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{14382529} = PI(7, 45, 49, 45, 1, 0)_{195057} \\ \ell_{569} &= \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14382529} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{11452289} = PI(7, 45, 8, 45, 1, 0)_{195057} \\ \ell_{569} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14382529} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{1145009} = PI(7, 45, 10, 45, 1, 0)_{195057} \\ \ell_{570} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14380529} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{1145009} = PI(7, 45, 8, 45, 1, 0)_{195057} \\ \ell_{570} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{14393729} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1$$

$$\begin{split} \ell_{577} &= \begin{bmatrix} 1 & 0 & 0 & e^{51} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{6600545} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{6600545} = \mathbf{PI}(7,45,36,45,1,0)_{197201} \\ \ell_{578} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{1333249} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1333349} = \mathbf{PI}(7,45,9,45,1,0)_{195500} \\ \ell_{579} &= \begin{bmatrix} 1 & e^{60} & e^{60} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3249740} = \begin{bmatrix} 1 & 12 & 12 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3249740} = \mathbf{PI}(0,12,0,12,1,0)_{13825} \\ \ell_{580} &= \begin{bmatrix} 1 & 0 & 0 & e^{29} \\ 0 & 1 & 1 & e^{32} \end{bmatrix}_{7191873} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{7191873} = \mathbf{PI}(8,12,13,12,1,0)_{6476} \\ \ell_{581} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{3} \end{bmatrix}_{266817} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{26817} = \mathbf{PI}(8,12,12,12,12,10,0)_{64713} \\ \ell_{582} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{2} \end{bmatrix}_{12782849} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{12782849} = \mathbf{PI}(8,12,24,12,1,0)_{65409} \\ \ell_{583} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{6391425} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{6391425} = \mathbf{PI}(8,12,24,12,1,0)_{66981} \\ \ell_{584} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{16779009} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{16779009} = \mathbf{PI}(8,12,40,12,1,0)_{66977} \\ \ell_{586} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{11986625} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{11986625} = \mathbf{PI}(8,12,21,12,1,0)_{6420} \\ \ell_{589} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{12520257} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{3195713} = \mathbf{PI}(8,12,21,12,1,0)_{65280} \\ \ell_{599} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{9854299} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{9854299} = \mathbf{PI}(8,12,21,12,1,0)_{65280} \\ \ell_{599} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{1021005} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{9854299} = \mathbf{PI}(8,12,21,12,1,0)_{65280} \\ \ell_{599} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{1021005} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{1021025} = \mathbf{PI}(8,12,41,12,1,0)_{66280} \\ \ell_{599} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{10121025} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{1021025} = \mathbf{PI}(8,12,2,12,12$$

$$\begin{split} \ell_{598} &= \begin{bmatrix} 1 & 0 & 0 & e^{41} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{7458689} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{7458689} = PI(8, 12, 22, 12, 1, 0)_{65343} \\ \ell_{599} &= \begin{bmatrix} 1 & 0 & 0 & e^{8} \\ 0 & 1 & 1 & e^{11} \end{bmatrix}_{10387841} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{10387841} = PI(8, 12, 50, 12, 1, 0)_{67107} \\ \ell_{600} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{3996161} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{3996161} = PI(8, 12, 62, 12, 1, 0)_{67863} \\ \ell_{601} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{9057857} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{10919361} = PI(8, 12, 42, 12, 1, 0)_{66035} \\ \ell_{602} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{10919361} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{10919361} = PI(8, 12, 38, 12, 1, 0)_{66351} \\ \ell_{603} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{16512193} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{16512193} = PI(8, 12, 3, 12, 1, 0)_{64404} \\ \ell_{604} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{3462529} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{3462529} = PI(8, 12, 27, 12, 1, 0)_{65638} \\ \ell_{606} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{37} \end{bmatrix}_{2399361} = \begin{bmatrix} 1 & 0 & 0 & 69 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{2399361} = PI(8, 12, 23, 12, 1, 0)_{65406} \\ \ell_{607} &= \begin{bmatrix} 1 & 0 & 0 & e^{22} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{31597861} = \begin{bmatrix} 1 & 0 & 0 & 69 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{15978561} = PI(8, 12, 31, 12, 1, 0)_{67926} \\ \ell_{609} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{1349025} = \begin{bmatrix} 1 & 0 & 0 & 69 \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{1349025} = PI(8, 12, 41, 12, 1, 0)_{64401} \\ \ell_{611} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{13049665} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{13049665} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{13049665} = PI(8, 12, 28, 12, 1, 0)_{64401} \\ \ell_{614} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{10652545} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{13049665} = PI(8, 12, 28, 12, 1, 0)_{64401} \\ \ell_{615} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{10652545} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{13049665} = PI(8, 12, 28, 12, 1, 0)_{64401} \\ \ell_{616} &= \begin{bmatrix} 1 & 0 & 0 & e^{40$$

$$\begin{split} \ell_{619} &= \begin{bmatrix} 1 & 0 & 0 & e^{7} \\ 0 & 1 & 1 & e^{10} \end{bmatrix}_{0324673} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{0324673} = PI(8, 12, 5, 12, 1, 0)_{64272} \\ \ell_{620} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{14650661} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{14650561} = PI(8, 12, 9, 12, 1, 0)_{64524} \\ \ell_{621} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{14650661} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{14650561} = PI(8, 12, 29, 12, 1, 0)_{65784} \\ \ell_{622} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{14116929} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{14116929} = PI(8, 12, 17, 12, 1, 0)_{65028} \\ \ell_{623} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{4529921} = \begin{bmatrix} 1 & 0 & 0 & 73 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{1867713} = PI(8, 12, 53, 12, 1, 0)_{67296} \\ \ell_{624} &= \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{1867713} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{3687393} = PI(8, 12, 47, 12, 1, 0)_{66792} \\ \ell_{625} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{2666177} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{2666177} = PI(8, 12, 33, 12, 1, 0)_{66366} \\ \ell_{627} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{533633} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{533633} = PI(8, 12, 6, 12, 1, 0)_{64355} \\ \ell_{628} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{8791041} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{8259137} = PI(8, 12, 30, 12, 1, 0)_{65847} \\ \ell_{629} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{8295137} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{15715841} = PI(8, 12, 54, 12, 1, 0)_{653647} \\ \ell_{630} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{14383745} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{1453993} = PI(8, 12, 54, 12, 1, 0)_{658547} \\ \ell_{633} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{14383745} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{14383745} = PI(8, 12, 54, 12, 1, 0)_{66095} \\ \ell_{633} &= \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{36} \end{bmatrix}_{1452993} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{1435393} = PI(8, 12, 54, 12, 1, 0)_{66095} \\ \ell_{634} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{14915393} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 &$$

$$\begin{split} &\ell_{640} = \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{4796737} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{4796737} = \mathbf{PI}(8, 12, 59, 12, 1, 0)_{67674} \\ &\ell_{641} = \begin{bmatrix} 1 & 0 & 0 & e^{51} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{6658241} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{6658241} = \mathbf{PI}(8, 12, 47, 12, 1, 0)_{66918} \\ &\ell_{642} = \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{1334081} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{1334081} = \mathbf{PI}(8, 12, 35, 12, 1, 0)_{66102} \\ &\ell_{643} = \begin{bmatrix} 1 & e^{29} & e^{29} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7306715} = \begin{bmatrix} 1 & 27 & 27 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7306715} = \mathbf{PI}(0, 27, 0, 27, 1, 0)_{15745} \\ &\ell_{644} = \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{3196481} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{3196481} \\ &\ell_{645} = \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{12785921} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{12785921} = \mathbf{PI}(9, 27, 27, 27, 1, 0)_{125194} \\ &\ell_{646} = \begin{bmatrix} 1 & 0 & 0 & e^{63} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{12785921} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{8522177} = \mathbf{PI}(9, 27, 45, 27, 1, 0)_{126328} \\ &\ell_{648} = \begin{bmatrix} 1 & 0 & 0 & e^{63} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{6329601} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{6392901} = \mathbf{PI}(9, 27, 13, 27, 1, 0)_{124312} \\ &\ell_{649} = \begin{bmatrix} 1 & 0 & 0 & e^{63} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1963873} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{1679329} = \mathbf{PI}(9, 27, 59, 27, 1, 0)_{122170} \\ &\ell_{650} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1963873} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{1983873} = \mathbf{PI}(9, 27, 32, 27, 1, 0)_{122509} \\ &\ell_{654} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1963373} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1790273} = \mathbf{PI}(9, 27, 32, 27, 1, 0)_{122509} \\ &\ell_{654} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1953873} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1790273} = \mathbf{PI}(9, 27, 32, 27, 1, 0)_{122695} \\ &\ell_{655} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{2133057} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1925773} = \mathbf{PI}(9, 27, 32, 27, 1, 0)_{1244942} \\ &\ell_{656} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{2133057} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 &$$

$$\begin{split} &\ell_{661} = \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{16247617} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{16247617} = \mathbf{PI}(9, 27, 2, 27, 1, 0)_{123619} \\ &\ell_{662} = \begin{bmatrix} 1 & 0 & 0 & e^{41} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{7460481} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{7460481} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{10389441} = \mathbf{PI}(9, 27, 25, 27, 1, 0)_{125084} \\ &\ell_{663} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{3995969} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{3995969} = \mathbf{PI}(9, 27, 34, 27, 1, 0)_{125635} \\ &\ell_{664} = \begin{bmatrix} 1 & 0 & 0 & e^{448} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{3995969} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{3995969} = \mathbf{PI}(9, 27, 15, 27, 1, 0)_{124438} \\ &\ell_{666} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{10920961} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{10920961} = \mathbf{PI}(9, 27, 20, 27, 1, 0)_{124438} \\ &\ell_{667} = \begin{bmatrix} 1 & 0 & 0 & e^{2} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{10920961} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{10920961} = \mathbf{PI}(9, 27, 20, 27, 1, 0)_{12453} \\ &\ell_{668} = \begin{bmatrix} 1 & 0 & 0 & e^{2} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{1067521} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{16513601} = \mathbf{PI}(9, 27, 46, 27, 1, 0)_{126391} \\ &\ell_{669} = \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{3462209} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3462209} = \mathbf{PI}(9, 27, 24, 27, 1, 0)_{125005} \\ &\ell_{670} = \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{2398785} = \begin{bmatrix} 1 & 0 & 0 & 91 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3462209} = \mathbf{PI}(9, 27, 35, 27, 1, 0)_{125698} \\ &\ell_{671} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{35081889} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{15981889} = \mathbf{PI}(9, 27, 35, 27, 1, 0)_{124816} \\ &\ell_{673} = \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{33317633} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 1 & 5 \end{bmatrix}_{3305441} = \mathbf{PI}(9, 27, 27, 27, 1, 0)_{124877} \\ &\ell_{675} = \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{33317633} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{360641} = \mathbf{PI}(9, 27, 63, 27, 1, 0)_{124627} \\ &\ell_{677} = \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3055909} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{32932545} = \mathbf{PI}(9, 27, 36, 27, 1, 0)_{12$$

$$\begin{split} &\ell_{682} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{5327553} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{5327533} = \mathbf{PI}(9, 27, 41, 27, 1, 0)_{126076} \\ &\ell_{683} = \begin{bmatrix} 1 & 0 & 0 & e^{7} \\ 0 & 1 & 1 & e^{41} \end{bmatrix}_{3322433} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{3322433} = \mathbf{PI}(9, 27, 19, 27, 1, 0)_{124690} \\ &\ell_{684} = \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{6125761} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{6125761} = \mathbf{PI}(9, 27, 8, 27, 1, 0)_{123997} \\ &\ell_{685} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{14647425} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{14647425} = \mathbf{PI}(9, 27, 37, 27, 1, 0)_{125824} \\ &\ell_{686} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{4530881} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{4530881} = \mathbf{PI}(9, 27, 30, 27, 1, 0)_{125383} \\ &\ell_{687} = \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{4530881} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{4530881} = \mathbf{PI}(9, 27, 30, 27, 1, 0)_{125383} \\ &\ell_{689} = \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{9589185} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{9689185} = \mathbf{PI}(9, 27, 40, 27, 1, 0)_{126013} \\ &\ell_{690} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{2666817} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{2666817} = \mathbf{PI}(9, 27, 51, 27, 1, 0)_{125887} \\ &\ell_{692} = \begin{bmatrix} 1 & 0 & 0 & e^{66} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{8788929} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{8788929} = \mathbf{PI}(9, 27, 38, 27, 1, 0)_{125887} \\ &\ell_{693} = \begin{bmatrix} 1 & 0 & 0 & e^{65} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{13584545} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14380545} = \mathbf{PI}(9, 27, 48, 27, 1, 0)_{126517} \\ &\ell_{696} = \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{13584545} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{13438533} = \mathbf{PI}(9, 27, 48, 27, 1, 0)_{126517} \\ &\ell_{697} = \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{1348465} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{13488833} = \mathbf{PI}(9, 27, 48, 27, 1, 0)_{126370} \\ &\ell_{697} = \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{13188609} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{13488833} = \mathbf{PI}(9, 27, 48, 27, 1, 0)_{126370} \\ &\ell_{699} = \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{45}$$

$$\begin{split} \ell_{703} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{7728337} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{7726337} = \mathbf{PI}(9, 27, 42, 27, 1, 0)_{126139} \\ \ell_{704} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{4795585} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{565817} = \mathbf{PI}(9, 27, 49, 27, 1, 0)_{126580} \\ \ell_{705} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{665817} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{665817} = \mathbf{PI}(9, 27, 28, 27, 1, 0)_{125257} \\ \ell_{706} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{1334401} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{1334401} = \mathbf{PI}(9, 27, 28, 27, 1, 0)_{125257} \\ \ell_{706} &= \begin{bmatrix} 1 & \epsilon^{9} & \epsilon^{0} & 0 \\ 0 & 0 & 0 \end{bmatrix}_{12716015} = \begin{bmatrix} 1 & 47 & 47 & 0 \\ 0 & 0 & 0 \end{bmatrix}_{13716015} = \mathbf{PI}(0, 47, 0, 47, 1, 0)_{18305} \\ \ell_{708} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{36} \end{bmatrix}_{9855553} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{9855553} = \mathbf{PI}(10, 47, 46, 47, 1, 0)_{205772} \\ \ell_{709} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{266945} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{12782913} = \mathbf{PI}(10, 47, 47, 47, 1, 0)_{206843} \\ \ell_{710} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{852213} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{32782913} = \mathbf{PI}(10, 47, 16, 47, 1, 0)_{206843} \\ \ell_{711} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{832497} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{3394497} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{3394497} = \mathbf{PI}(10, 47, 16, 47, 1, 0)_{206898} \\ \ell_{713} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{11985052} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{11985055} = \mathbf{PI}(10, 47, 13, 47, 1, 0)_{206898} \\ \ell_{714} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{11985052} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{3197249} = \mathbf{PI}(10, 47, 62, 47, 1, 0)_{206898} \\ \ell_{714} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{3197249} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{3197249} = \mathbf{PI}(10, 47, 62, 47, 1, 0)_{206890} \\ \ell_{715} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{2133569} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{12516333} = \mathbf{PI}(10, 47, 14, 47, 1, 0)_{206978} \\ \ell_{720$$

$$\begin{split} \ell_{724} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{11719361} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{11719361} = \mathbf{Pl}(10, 47, 50, 47, 1, 0)_{206024} \\ \ell_{725} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{16249053} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 2^{19} \end{bmatrix}_{16249053} = \mathbf{Pl}(10, 47, 34, 47, 1, 0)_{20516} \\ \ell_{726} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{7458177} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{7458177} = \mathbf{Pl}(10, 47, 13, 47, 1, 0)_{203693} \\ \ell_{727} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{8} \\ 0 & 1 & 1 & \epsilon^{99} \end{bmatrix}_{10388929} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{3995009} = \mathbf{Pl}(10, 47, 24, 47, 1, 0)_{203609} \\ \ell_{728} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{3995099} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{9055489} = \mathbf{Pl}(10, 47, 61, 47, 1, 0)_{206717} \\ \ell_{729} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{3995299} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{1067777} = \mathbf{Pl}(10, 47, 14, 47, 17, 0)_{206717} \\ \ell_{731} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{69} \end{bmatrix}_{10922369} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{1067777} = \mathbf{Pl}(10, 47, 35, 47, 1, 0)_{206679} \\ \ell_{732} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{16511361} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{1051361} = \mathbf{Pl}(10, 47, 28, 47, 1, 0)_{206679} \\ \ell_{734} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{3463169} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{3463169} = \mathbf{Pl}(10, 47, 28, 47, 1, 0)_{206658} \\ \ell_{734} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{5061633} = \begin{bmatrix} 1 & 0 & 0 & 99 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{5061633} = \mathbf{Pl}(10, 47, 51, 47, 1, 0)_{206654} \\ \ell_{737} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{33316289} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{15947681} = \mathbf{Pl}(10, 47, 24, 47, 1, 0)_{206654} \\ \ell_{739} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3039353} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 1 & 3 \end{bmatrix}_{33049857} = \begin{bmatrix} 1 & 0 & 0 & 69 \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3049857} = \mathbf{Pl}(10, 47, 24, 47, 1, 0)_{206528} \\ \ell_{749} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3065699} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 159 \end{bmatrix}_{13049857} = \mathbf{Pl}(10,$$

$$\begin{split} \ell_{745} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{3729089} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{3729089} = \mathbf{Pl}(10, 47, 26, 47, 1, 0)_{204512} \\ \ell_{746} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{64} \end{bmatrix}_{5328833} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{5328833} = \mathbf{Pl}(10, 47, 53, 47, 1, 0)_{206213} \\ \ell_{747} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{7} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{9322177} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{9322177} = \mathbf{Pl}(10, 47, 4, 47, 1, 0)_{203126} \\ \ell_{748} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{6128385} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{14649985} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{14649985} = \mathbf{Pl}(10, 47, 59, 47, 1, 0)_{206591} \\ \ell_{750} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{8} \end{bmatrix}_{14116609} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{141649985} = \mathbf{Pl}(10, 47, 20, 47, 1, 0)_{204134} \\ \ell_{751} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{14527345} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{4527745} = \mathbf{Pl}(10, 47, 20, 47, 1, 0)_{204154} \\ \ell_{752} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1867385} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{9589889} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{9589889} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{533889} = \mathbf{Pl}(10, 47, 39, 47, 1, 0)_{205142} \\ \ell_{754} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{533889} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{533889} = \mathbf{Pl}(10, 47, 39, 47, 1, 0)_{205331} \\ \ell_{756} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{533889} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{533889} = \mathbf{Pl}(10, 47, 39, 47, 1, 0)_{205331} \\ \ell_{756} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{34384065} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{1453065} = \mathbf{Pl}(10, 47, 55, 47, 1, 0)_{206339} \\ \ell_{759} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{14384065} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{13850689} = \mathbf{Pl}(10, 47, 55, 47, 1, 0)_{206339} \\ \ell_{760} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{1453065} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{14533065} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{14950333} \\ \ell_{761} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\$$

$$\begin{split} &\ell_{766} = \begin{bmatrix} 1 & 0 & 0 & 0 & c^{38} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{13583233} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{13583233} = \mathbf{Pl}(10,47,9,47,1,0)_{030441} \\ &\ell_{767} = \begin{bmatrix} 1 & 0 & 0 & c^{13} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{7723841} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 2^{16} \end{bmatrix}_{4794945} = \mathbf{Pl}(10,47,41,47,1,0)_{203457} \\ &\ell_{769} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{36661185} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{4661185} = \mathbf{Pl}(10,47,57,47,1,0)_{204665} \\ &\ell_{770} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{1333697} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{6661185} = \mathbf{Pl}(10,47,57,47,1,0)_{204666} \\ &\ell_{770} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{1333697} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{1333697} = \mathbf{Pl}(10,47,2,47,1,0)_{204260} \\ &\ell_{771} = \begin{bmatrix} 1 & \epsilon^{45} & \epsilon^{45} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10011365} = \begin{bmatrix} 1 & 37 & 37 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10011365} = \mathbf{Pl}(10,47,2,47,1,0)_{204260} \\ &\ell_{772} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{257009} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{267009} = \mathbf{Pl}(11,37,37,37,1,0)_{165516} \\ &\ell_{774} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{2570595} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{12755985} = \mathbf{Pl}(11,37,43,37,1,0)_{165894} \\ &\ell_{775} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{6339385} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{6339385} = \mathbf{Pl}(11,37,14,37,1,0)_{164067} \\ &\ell_{776} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{107525} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{6339385} = \mathbf{Pl}(11,37,55,37,1,0)_{164067} \\ &\ell_{776} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{107525} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{6339385} = \mathbf{Pl}(11,37,55,37,1,0)_{164319} \\ &\ell_{779} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{107525} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{6393985} = \mathbf{Pl}(11,37,57,37,1,0)_{164319} \\ &\ell_{779} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{107525} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{11987265} = \mathbf{Pl}(11,37,57,37,1,0)_{164339} \\ &\ell_{780} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{109329} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 55 \end{bmatrix}_$$

$$\begin{split} \ell_{787} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{1601537} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{1601537} = \mathbf{Pl}(11,37,30,37,1,0)_{165075} \\ \ell_{788} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{1720641} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{1720641} = \mathbf{Pl}(11,37,59,37,1,0)_{166902} \\ \ell_{789} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{16247297} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{16247297} = \mathbf{Pl}(11,37,53,37,1,0)_{166524} \\ \ell_{790} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{7456897} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{7456897} = \mathbf{Pl}(11,37,16,37,1,0)_{164193} \\ \ell_{791} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{10387329} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{3995073} = \mathbf{Pl}(11,37,12,37,1,0)_{163941} \\ \ell_{793} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{39957499} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{10619745} = \mathbf{Pl}(11,37,39,37,1,0)_{163414} \\ \ell_{794} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1068033} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{1068033} = \mathbf{Pl}(11,37,17,37,1,0)_{164256} \\ \ell_{795} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{16614305} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{1068033} = \mathbf{Pl}(11,37,52,37,1,0)_{166324} \\ \ell_{796} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3463873} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{3463873} = \mathbf{Pl}(11,37,58,37,1,0)_{166329} \\ \ell_{798} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3663873} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{3463873} = \mathbf{Pl}(11,37,33,37,1,0)_{166338} \\ \ell_{799} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3663873} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{3463877} = \mathbf{Pl}(11,37,33,37,1,0)_{166334} \\ \ell_{800} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3690073} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{3463873} = \mathbf{Pl}(11,37,33,37,1,0)_{166334} \\ \ell_{801} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{15447297} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{15980289} = \mathbf{Pl}(11,37,33,37,1,0)_{163374} \\ \ell_{802} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{13317441} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 3$$

$$\begin{split} \ell_{808} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{2931649} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{2931649} = \mathbf{Pl}(11, 37, 46, 37, 1, 0)_{166083} \\ \ell_{809} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{3728449} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{3728449} = \mathbf{Pl}(11, 37, 32, 37, 1, 0)_{165201} \\ \ell_{810} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{5330113} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{5330133} = \mathbf{Pl}(11, 37, 5, 37, 1, 0)_{163500} \\ \ell_{811} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{6127169} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{0127169} = \mathbf{Pl}(11, 37, 51, 37, 1, 0)_{164571} \\ \ell_{813} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{14646977} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{14646977} = \mathbf{Pl}(11, 37, 24, 37, 1, 0)_{164677} \\ \ell_{814} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{14115265} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{14646977} = \mathbf{Pl}(11, 37, 61, 37, 1, 0)_{16497} \\ \ell_{815} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{14115265} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{14528705} = \mathbf{Pl}(11, 37, 4, 37, 1, 0)_{163437} \\ \ell_{816} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{1867265} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{1867265} = \mathbf{Pl}(11, 37, 47, 37, 1, 0)_{163437} \\ \ell_{818} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{3587585} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{2666049} = \mathbf{Pl}(11, 37, 47, 37, 1, 0)_{163815} \\ \ell_{819} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{354017} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{3527153} = \mathbf{Pl}(11, 37, 34, 37, 1, 0)_{163922} \\ \ell_{820} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{36909313} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{3527153} = \mathbf{Pl}(11, 37, 44, 37, 1, 0)_{163925} \\ \ell_{821} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{36909313} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{3527153} = \mathbf{Pl}(11, 37, 44, 37, 1, 0)_{163925} \\ \ell_{822} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{13713025} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 1 & 5 \end{bmatrix}_{14351377} = \mathbf{Pl}(11, 37, 44, 37, 1, 0)_{164908} \\ \ell_{826} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0$$

$$\begin{split} \ell_{829} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^4 \end{bmatrix}_{7990145} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{7990145} = \mathbf{PI}(11,37,6,37,1,0)_{163563} \\ \ell_{830} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{13584065} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{13584065} = \mathbf{PI}(11,37,35,37,1,0)_{163590} \\ \ell_{831} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{7723649} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{7723649} = \mathbf{PI}(11,37,26,37,1,0)_{164823} \\ \ell_{832} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{4793793} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{4793793} = \mathbf{PI}(11,37,49,37,1,0)_{164827} \\ \ell_{833} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{6659713} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{1334017} = \mathbf{PI}(11,37,49,37,1,0)_{164415} \\ \ell_{834} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{1334017} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{2167880} = \mathbf{PI}(11,37,20,37,1,0)_{164415} \\ \ell_{835} &= \begin{bmatrix} 1 & \epsilon^{5} & \epsilon^{3} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{216783} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{267073} = \mathbf{PI}(12,8,9,8,1,0)_{48599} \\ \ell_{837} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{852633} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{267073} = \mathbf{PI}(12,8,16,8,1,0)_{49597} \\ \ell_{839} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{3198785} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{10778933} = \mathbf{PI}(12,8,48,8,1,0)_{49597} \\ \ell_{840} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{3198785} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{11987329} = \mathbf{PI}(12,8,48,8,1,0)_{51109} \\ \ell_{841} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{3198785} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{3198785} = \mathbf{PI}(12,8,40,8,1,0)_{51016} \\ \ell_{844} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{3198785} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{3198785} = \mathbf{PI}(12,8,40,8,1,0)_{51068} \\ \ell_{845} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{7191681} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{3198785} = \mathbf{PI}(12,8,40,8,1,0)_{51068} \\ \ell_{846} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{7191681} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{12518401} = \mathbf{PI}(12,8,49,8,1,0)_{51076$$

$$\begin{split} \ell_{850} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{5596353} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{5596353} = \mathbf{PI}(12,8,25,8,1,0)_{49600} \\ \ell_{851} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{100385} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{1000385} = \mathbf{PI}(12,8,35,8,1,0)_{50290} \\ \ell_{852} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{17} \end{bmatrix}_{11720769} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{11720769} = \mathbf{PI}(12,8,43,8,1,0)_{50794} \\ \ell_{853} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{16248321} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{16248321} = \mathbf{PI}(12,8,51,8,1,0)_{51298} \\ \ell_{854} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{10387955} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{7450777} = \mathbf{PI}(12,8,59,8,1,0)_{51802} \\ \ell_{855} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{3096929} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{3096929} = \mathbf{PI}(12,8,11,8,1,0)_{48778} \\ \ell_{857} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{3096929} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{9056129} = \mathbf{PI}(12,8,11,8,1,0)_{49786} \\ \ell_{858} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{10619041} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{10919041} = \mathbf{PI}(12,8,28,8,1,0)_{49282} \\ \ell_{859} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{10613857} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{16513857} = \mathbf{PI}(12,8,10,8,1,0)_{49219} \\ \ell_{860} &= \begin{bmatrix} 1 & 0 & 0 & e^{21} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{2397569} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{15981761} = \mathbf{PI}(12,8,28,8,1,0)_{49219} \\ \ell_{863} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{2397569} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{2397569} = \mathbf{PI}(12,8,58,8,1,0)_{51235} \\ \ell_{864} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{15447617} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{15981761} = \mathbf{PI}(12,8,59,8,1,0)_{51235} \\ \ell_{866} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{15447617} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{13317121} = \mathbf{PI}(12,8,59,8,1,0)_{51235} \\ \ell_{866} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{3317121} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{13317121} = \mathbf{PI}(12,8,59,8,1,$$

$$\begin{split} \ell_{871} &= \begin{bmatrix} 1 & 0 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{12252865} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{12252865} = \mathbf{PI}(12,8,7,8,1,0)_{48526} \\ \ell_{872} &= \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{2930689} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{2930689} = \mathbf{PI}(12,8,15,8,1,0)_{49030} \\ \ell_{873} &= \begin{bmatrix} 1 & 0 & 0 & e^{40} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3730881} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{373081} = \mathbf{PI}(12,8,23,8,1,0)_{49634} \\ \ell_{874} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{5329281} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{5329281} = \mathbf{PI}(12,8,31,8,1,0)_{50038} \\ \ell_{875} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{9321665} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{9321665} = \mathbf{PI}(12,8,6,8,1,0)_{48463} \\ \ell_{876} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{14648897} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{1417825} = \mathbf{PI}(12,8,30,8,1,0)_{49975} \\ \ell_{879} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{4528065} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{4528065} = \mathbf{PI}(12,8,30,8,1,0)_{49975} \\ \ell_{880} &= \begin{bmatrix} 1 & 0 & 0 & e^{30} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{4528065} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{4528065} = \mathbf{PI}(12,8,46,8,1,0)_{5083} \\ \ell_{881} &= \begin{bmatrix} 1 & 0 & 0 & e^{30} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{3628067} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{9590273} = \mathbf{PI}(12,8,46,8,1,0)_{5083} \\ \ell_{882} &= \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{61} \end{bmatrix}_{364641} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{2664641} = \mathbf{PI}(12,8,48,1,0)_{48841} \\ \ell_{885} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{364641} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{8257921} = \mathbf{PI}(12,8,28,8,1,0)_{49345} \\ \ell_{885} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{1373153} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{1573153} = \mathbf{PI}(12,8,28,8,1,0)_{49345} \\ \ell_{885} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{13433361} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{14383361} = \mathbf{PI}(12,8,28,8,1,0)_{49345} \\ \ell_{885} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{13433361} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{13433361} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1$$

$$\begin{split} \ell_{892} &= \begin{bmatrix} 1 & 0 & 0 & c^{42} \\ 0 & 1 & 1 & c^{39} \end{bmatrix}_{14913473} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{14913473} = \mathbf{PI}(12,8,45,8,1,0)_{50920} \\ \ell_{893} &= \begin{bmatrix} 1 & 0 & 0 & c^{43} \\ 0 & 1 & 1 & c^{46} \end{bmatrix}_{7991873} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{7991873} = \mathbf{PI}(12,8,53,8,1,0)_{51424} \\ \ell_{894} &= \begin{bmatrix} 1 & 0 & 0 & c^{33} \\ 0 & 1 & 1 & c^{10} \end{bmatrix}_{1726849} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{13582657} = \mathbf{PI}(12,8,61,8,1,0)_{51928} \\ \ell_{895} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{10} \end{bmatrix}_{7726849} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{7726849} = \mathbf{PI}(12,8,5,8,1,0)_{48400} \\ \ell_{806} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{48} \end{bmatrix}_{6658561} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{4795137} = \mathbf{PI}(12,8,13,8,1,0)_{48904} \\ \ell_{807} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{48} \end{bmatrix}_{6658561} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{6658561} = \mathbf{PI}(12,8,21,8,1,0)_{49408} \\ \ell_{899} &= \begin{bmatrix} 1 & c^{32} & c^{32} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7036250} = \begin{bmatrix} 1 & 26 & 26 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7036250} = \mathbf{PI}(12,8,21,8,1,0)_{49408} \\ \ell_{899} &= \begin{bmatrix} 1 & c^{32} & c^{32} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7036250} = \begin{bmatrix} 1 & 26 & 26 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7036250} = \mathbf{PI}(13,26,27,26,1,0)_{121229} \\ \ell_{901} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{2313009} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{233009} = \mathbf{PI}(13,26,27,26,1,0)_{121229} \\ \ell_{902} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{267137} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{2786049} = \mathbf{PI}(13,26,26,26,1,0)_{1222604} \\ \ell_{903} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{3633025} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{16778945} = \mathbf{PI}(13,26,39,26,1,0)_{12095} \\ \ell_{906} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{3633025} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{1678945} = \mathbf{PI}(13,26,39,26,1,0)_{12095} \\ \ell_{906} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{399553} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{31984961} = \mathbf{PI}(13,26,39,26,1,0)_{12095} \\ \ell_{909} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{399553} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{31984961} = \mathbf{PI}(13,26,38,2$$

$$\begin{split} \ell_{913} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{10120193} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{10120193} = PI(13, 26, 47, 26, 1, 0)_{122489} \\ \ell_{914} &= \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{5595137} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{5595137} = PI(13, 26, 53, 26, 1, 0)_{122867} \\ \ell_{915} &= \begin{bmatrix} 1 & 0 & 0 & e^{59} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{1600769} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{1600769} = PI(13, 26, 53, 26, 1, 0)_{121796} \\ \ell_{916} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{11718977} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{11718977} = PI(13, 26, 62, 26, 1, 0)_{123434} \\ \ell_{917} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{16244929} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{1624929} = PI(13, 26, 16, 26, 1, 0)_{12058} \\ \ell_{918} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{9} \end{bmatrix}_{7459521} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{7459521} = PI(13, 26, 10, 26, 1, 0)_{120158} \\ \ell_{919} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{10386305} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{3967249} = PI(13, 26, 55, 26, 1, 0)_{122993} \\ \ell_{921} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{9058305} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{9058305} = PI(13, 26, 54, 26, 1, 0)_{121103} \\ \ell_{922} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{10920513} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{1068545} = PI(13, 26, 54, 26, 1, 0)_{122930} \\ \ell_{924} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{16511037} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{2369993} = PI(13, 26, 54, 26, 1, 0)_{122930} \\ \ell_{925} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{16511037} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{15578945} = PI(13, 26, 24, 26, 1, 0)_{122950} \\ \ell_{926} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{1548001} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1548001} = PI(13, 26, 41, 26, 1, 0)_{122950} \\ \ell_{926} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{13352673} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{1548001} = PI(13, 26, 11, 26, 1, 0)_{122951} \\ \ell_{926} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{13352673} = \begin{bmatrix} 1$$

$$\begin{split} \ell_{934} &= \begin{bmatrix} 1 & 0 & 0 & e^{.56} \\ 0 & 1 & 1 & e^{.24} \end{bmatrix}_{10655041} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{10655041} = \mathbf{PI}(13, 26, 7, 26, 1, 0)_{119969} \\ \ell_{935} &= \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{.88} \end{bmatrix}_{12250177} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{12250177} = \mathbf{PI}(13, 26, 32, 26, 1, 0)_{121544} \\ \ell_{936} &= \begin{bmatrix} 1 & 0 & 0 & e^{.18} \\ 0 & 1 & 1 & e^{.49} \end{bmatrix}_{2931265} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{2931265} = \mathbf{PI}(13, 26, 58, 26, 1, 0)_{123182} \\ \ell_{937} &= \begin{bmatrix} 1 & 0 & 0 & e^{.40} \\ 0 & 1 & 1 & e^{.88} \end{bmatrix}_{3730753} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{3730753} = \mathbf{PI}(13, 26, 20, 26, 1, 0)_{120788} \\ \ell_{938} &= \begin{bmatrix} 1 & 0 & 0 & e^{.57} \\ 0 & 1 & 1 & e^{.23} \end{bmatrix}_{5328513} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{9323905} = \mathbf{PI}(13, 26, 14, 26, 1, 0)_{120410} \\ \ell_{940} &= \begin{bmatrix} 1 & 0 & 0 & e^{.26} \\ 0 & 1 & 1 & e^{.15} \end{bmatrix}_{14648065} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{14648065} = \mathbf{PI}(13, 26, 15, 26, 1, 0)_{120473} \\ \ell_{942} &= \begin{bmatrix} 1 & 0 & 0 & e^{.47} \\ 0 & 1 & 1 & e^{.48} \end{bmatrix}_{14115073} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{14115073} = \mathbf{PI}(13, 26, 50, 26, 1, 0)_{120473} \\ \ell_{944} &= \begin{bmatrix} 1 & 0 & 0 & e^{.42} \\ 0 & 1 & 1 & e^{.48} \end{bmatrix}_{14115073} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{1415073} = \mathbf{PI}(13, 26, 50, 26, 1, 0)_{120473} \\ \ell_{944} &= \begin{bmatrix} 1 & 0 & 0 & e^{.47} \\ 0 & 1 & 1 & e^{.7} \end{bmatrix}_{1866369} = \begin{bmatrix} 1 & 0 & 0 & 77 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{1415073} = \mathbf{PI}(13, 26, 50, 26, 1, 0)_{122048} \\ \ell_{945} &= \begin{bmatrix} 1 & 0 & 0 & e^{.42} \\ 0 & 1 & 1 & e^{.42} \end{bmatrix}_{2694257} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{3657969} = \mathbf{PI}(13, 26, 40, 26, 1, 0)_{122048} \\ \ell_{946} &= \begin{bmatrix} 1 & 0 & 0 & e^{.47} \\ 0 & 1 & 1 & e^{.47} \end{bmatrix}_{9587969} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{9587969} = \mathbf{PI}(13, 26, 23, 26, 1, 0)_{122047} \\ \ell_{947} &= \begin{bmatrix} 1 & 0 & 0 & e^{.47} \\ 0 & 1 & 1 & e^{.47} \end{bmatrix}_{8595369} = \mathbf{PI}(13, 26, 35, 26, 1, 0)_{122047} \\ \ell_{948} &= \begin{bmatrix} 1 & 0 & 0 & e^{.47} \\ 0 & 1 & 1 & e^{.47} \end{bmatrix}_{8595769} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{9587969} = \mathbf{PI}(13, 26, 35, 26, 1, 0)_{122047} \\ \ell_{948} &= \begin{bmatrix} 1 & 0 & 0 & e^{.47} \\ 0 & 1 & 1 & e^{.47} \end{bmatrix}$$

$$\ell_{955} = \begin{bmatrix} 1 & 0 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{15182529} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{15182529} = \mathbf{PI}(13, 26, 31, 26, 1, 0)_{121481}$$

$$\ell_{956} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{14917057} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{14917057} = \mathbf{PI}(13, 26, 5, 26, 1, 0)_{119843}$$

$$\ell_{957} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{7992513} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{7992513} = \mathbf{PI}(13, 26, 49, 26, 1, 0)_{122237}$$

$$\ell_{958} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{7724993} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{13585617} = \mathbf{PI}(13, 26, 49, 26, 1, 0)_{122615}$$

$$\ell_{959} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{7724993} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{4793985} = \mathbf{PI}(13, 26, 22, 26, 1, 0)_{120284}$$

$$\ell_{960} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{473985} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{6659009} = \mathbf{PI}(13, 26, 34, 26, 1, 0)_{120284}$$

$$\ell_{962} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{1335169} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{1335169} = \mathbf{PI}(13, 26, 56, 26, 1, 0)_{123056}$$

$$\ell_{963} = \begin{bmatrix} 1 & \epsilon^{23} & \epsilon^{23} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10281830} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{2659009} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{1335169} = \mathbf{PI}(14, 38, 39, 38, 1, 0)_{169514}$$

$$\ell_{964} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{267201} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10281830} = \mathbf{PI}(14, 38, 39, 38, 1, 0)_{169541}$$

$$\ell_{965} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{267201} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1273041} = \mathbf{PI}(14, 38, 39, 38, 1, 0)_{16992}$$

$$\ell_{968} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{12783041} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{6391561} = \mathbf{PI}(14, 38, 29, 38, 1, 0)_{169544}$$

$$\ell_{969} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1928300} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{12783041} = \mathbf{PI}(14, 38, 29, 38, 1, 0)_{169544}$$

$$\ell_{970} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1938300} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{1983300} = \mathbf{PI}(14, 38, 29$$

$$\begin{split} &\ell_{976} = \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{2131521} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{2131521} = \mathbf{PI}(14,38,44,38,1,0)_{169929} \\ &\ell_{977} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{9} \end{bmatrix}_{6926913} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1315617} = \mathbf{PI}(14,38,10,38,1,0)_{167787} \\ &\ell_{978} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10119617} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10119617} = \mathbf{PI}(14,38,1,38,1,0)_{167220} \\ &\ell_{979} = \begin{bmatrix} 1 & 0 & 0 & e^{59} \\ 0 & 1 & 1 & e^{39} \end{bmatrix}_{1600129} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{10119617} = \mathbf{PI}(14,38,46,38,1,0)_{167025} \\ &\ell_{980} = \begin{bmatrix} 1 & 0 & 0 & e^{29} \\ 0 & 1 & 1 & e^{99} \end{bmatrix}_{11718145} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{11718145} = \mathbf{PI}(14,38,8,38,1,0)_{167661} \\ &\ell_{981} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{7457217} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{16246593} = \mathbf{PI}(14,38,3,38,1,0)_{167346} \\ &\ell_{982} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{7457217} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{10386817} = \mathbf{PI}(14,38,21,38,1,0)_{169488} \\ &\ell_{983} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3998337} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{3998337} = \mathbf{PI}(14,38,51,38,1,0)_{169489} \\ &\ell_{984} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3998337} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{3998337} = \mathbf{PI}(14,38,56,38,1,0)_{170370} \\ &\ell_{985} = \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3998337} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{10922177} \\ &\ell_{987} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{16514049} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{10922177} \\ &\ell_{989} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{16514049} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{16514049} \\ &\ell_{999} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{15981185} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{3968247} = \mathbf{PI}(14,38,20,38,1,0)_{169225} \\ &\ell_{999} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{15981185} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{396721} = \mathbf{PI}(14,38,20,38,1,0)_{169225} \\ &\ell_{999} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}$$

$$\begin{split} \ell_{997} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{5859073} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{5859073} = \mathbf{Pl}(14,38,16,38,1,0)_{168165} \\ \ell_{998} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{10055489} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{10655489} = \mathbf{Pl}(14,38,54,38,1,0)_{170559} \\ \ell_{999} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{12251009} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{12251099} = \mathbf{Pl}(14,38,6,38,1,0)_{169735} \\ \ell_{1000} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{2929537} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{2929537} = \mathbf{Pl}(14,38,32,38,1,0)_{169173} \\ \ell_{1001} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{3731649} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{3731649} = \mathbf{Pl}(14,38,43,38,1,0)_{16976} \\ \ell_{1002} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{5327745} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{5327745} = \mathbf{Pl}(14,38,13,38,1,0)_{167976} \\ \ell_{1003} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{7} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3234161} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3234161} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{3324161} = \mathbf{Pl}(14,38,12,38,1,0)_{167913} \\ \ell_{1004} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{14649601} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{14649601} = \mathbf{Pl}(14,38,7,38,1,0)_{167508} \\ \ell_{1006} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{14117249} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{4529985} = \mathbf{Pl}(14,38,7,38,1,0)_{168228} \\ \ell_{1008} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{366817} = \begin{bmatrix} 1 & 0 & 0 & 70 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{1866817} = \mathbf{Pl}(14,38,53,38,1,0)_{169236} \\ \ell_{1019} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{354401} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{354801} = \mathbf{Pl}(14,38,53,38,1,0)_{169375} \\ \ell_{1019} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{354401} = \begin{bmatrix} 1 & 0 & 0 & 70 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{366817} = \mathbf{Pl}(14,38,55,38,1,0)_{169375} \\ \ell_{1019} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{354401} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{3257025} = \mathbf{Pl}(14,38,53,38,1,0)_{169677} \\ \ell_{1014} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{$$

$$\begin{split} \ell_{1018} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{11187329} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{11187329} = \mathbf{PI}(14,38,35,38,1,0)_{169362} \\ \ell_{1019} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{15180865} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{15180865} = \mathbf{PI}(14,38,4,38,1,0)_{169209} \\ \ell_{1020} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{14914433} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{14914433} = \mathbf{PI}(14,38,34,38,1,0)_{169209} \\ \ell_{1021} &= \begin{bmatrix} 1 & 0 & 0 & e^{49} \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{7990593} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 2^{13} \end{bmatrix}_{7990593} = \mathbf{PI}(14,38,41,38,1,0)_{169240} \\ \ell_{1022} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{13582849} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{13582849} = \mathbf{PI}(14,38,15,38,1,0)_{169102} \\ \ell_{1023} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{7723137} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{7723137} = \mathbf{PI}(14,38,63,38,1,0)_{171126} \\ \ell_{1024} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{6661505} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{6661505} = \mathbf{PI}(14,38,43,38,1,0)_{168732} \\ \ell_{1025} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1334977} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{1334977} = \mathbf{PI}(14,38,52,38,1,0)_{170433} \\ \ell_{1027} &= \begin{bmatrix} 1 & e^{15} & e^{15} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5683925} = \begin{bmatrix} 1 & 21 & 21 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5683925} = \mathbf{PI}(0,21,0,21,1,0)_{100945} \\ \ell_{1029} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{10122049} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{12786113} = \mathbf{PI}(15,21,20,21,1,0)_{100945} \\ \ell_{1030} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{267265} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{3822049} = \mathbf{PI}(15,21,21,21,21,1,0)_{101008} \\ \ell_{1031} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{3822049} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{267265} = \mathbf{PI}(15,21,32,21,1,0)_{101031} \\ \ell_{1033} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{16773135} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{267265} = \mathbf{PI}(15,21,32,21,1,0)_{101031} \\ \ell_{1034} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{389017} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0$$

$$\begin{split} \ell_{1039} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{0856705} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{9856705} = \mathbf{Pl}(15, 21, 52, 21, 1, 0)_{102901} \\ \ell_{1040} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{31} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{6927297} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{2132033} = \mathbf{Pl}(15, 21, 62, 21, 1, 0)_{102394} \\ \ell_{1041} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{6927297} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{6927297} = \mathbf{Pl}(15, 21, 43, 21, 1, 0)_{102394} \\ \ell_{1042} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{5592449} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{5592449} = \mathbf{Pl}(15, 21, 1, 21, 1, 0)_{99748} \\ \ell_{1043} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{11719425} = \begin{bmatrix} 1 & 0 & 0 & 64 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{11719425} = \mathbf{Pl}(15, 21, 3, 21, 1, 0)_{99874} \\ \ell_{1044} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{11719425} = \begin{bmatrix} 1 & 0 & 0 & 64 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{11719425} = \mathbf{Pl}(15, 21, 3, 21, 1, 0)_{99874} \\ \ell_{1045} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{16246401} = \begin{bmatrix} 1 & 0 & 0 & 64 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{16246401} = \mathbf{Pl}(15, 21, 3, 21, 1, 0)_{103465} \\ \ell_{1046} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{8} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{10388417} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{10388417} = \mathbf{Pl}(15, 21, 35, 21, 1, 0)_{101890} \\ \ell_{1049} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{30956965} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{30956965} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{30956965} = \mathbf{Pl}(15, 21, 28, 21, 1, 0)_{10149} \\ \ell_{1050} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{37} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{1069057} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{10919681} = \mathbf{Pl}(15, 21, 28, 21, 1, 0)_{101890} \\ \ell_{1052} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{2398145} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{3464641} = \mathbf{Pl}(15, 21, 28, 21, 1, 0)_{10149} \\ \ell_{1052} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{37} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{1069057} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{39919681} = \mathbf{Pl}(15, 21, 28, 21, 1, 0)_{101499} \\ \ell_{1053} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{3364641} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{39919681} = \mathbf{Pl}(15, 21, 34, 21$$

$$\begin{split} \ell_{1060} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{13052481} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{13052481} = PI(15, 21, 57, 21, 1, 0)_{103276} \\ \ell_{1061} &= \begin{bmatrix} 1 & 0 & 0 & e^{14} \\ 0 & 1 & 1 & e^{4} \end{bmatrix}_{5859713} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{5859713} = PI(15, 21, 6, 21, 1, 0)_{100063} \\ \ell_{1062} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{41} \end{bmatrix}_{10653953} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{10653953} = PI(15, 21, 19, 21, 1, 0)_{101260} \\ \ell_{1063} &= \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{12253953} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{12253953} = PI(15, 21, 25, 21, 1, 0)_{101260} \\ \ell_{1064} &= \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3732033} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{3929857} = PI(15, 21, 12, 21, 1, 0)_{101260} \\ \ell_{1065} &= \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3732033} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{3732033} = PI(15, 21, 25, 21, 1, 0)_{101289} \\ \ell_{1066} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3732033} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{3732033} = PI(15, 21, 38, 21, 1, 0)_{102898} \\ \ell_{1067} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{9321921} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{9321921} = PI(15, 21, 39, 21, 1, 0)_{102142} \\ \ell_{1068} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{37} \end{bmatrix}_{14618385} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{6126977} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{6126977} = PI(15, 21, 32, 21, 1, 0)_{102142} \\ \ell_{1070} &= \begin{bmatrix} 1 & 0 & 0 & e^{17} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{14114360} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{14114360} = PI(15, 21, 24, 21, 1, 0)_{101197} \\ \ell_{1071} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{14114360} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{14514360} = PI(15, 21, 24, 21, 1, 0)_{100192} \\ \ell_{1073} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{3603489} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{351073} = PI(15, 21, 25, 21, 1, 0)_{103213} \\ \ell_{1074} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{14} \end{bmatrix}_{3878673} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{5786073} = PI(15, 21, 25, 21, 1, 0)_{103339} \\ \ell_{1076} &= \begin{bmatrix}$$

$$\begin{split} \ell_{1081} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{13848513} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{13848513} = PI(15, 21, 37, 21, 1, 0)_{102010} \\ \ell_{1082} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{1184897} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{11184897} = PI(15, 21, 48, 21, 1, 0)_{102709} \\ \ell_{1083} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{15181441} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{15181441} = PI(15, 21, 49, 21, 1, 0)_{102772} \\ \ell_{1084} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{14915999} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{14915999} = PI(15, 21, 36, 21, 1, 0)_{101933} \\ \ell_{1085} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1358937} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{33583937} = PI(15, 21, 14, 21, 1, 0)_{100567} \\ \ell_{1087} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1358937} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{7724353} = PI(15, 21, 14, 21, 1, 0)_{100567} \\ \ell_{1089} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{4790289} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{6659905} = PI(15, 21, 146, 21, 1, 0)_{102583} \\ \ell_{1090} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1358937} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{6659905} = PI(15, 21, 46, 21, 1, 0)_{102583} \\ \ell_{1090} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{13783155} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{1334785} = PI(15, 21, 46, 21, 1, 0)_{102583} \\ \ell_{1091} &= \begin{bmatrix} 1 & \epsilon^{69} & \epsilon^{59} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1626950} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{11720257} = PI(16, 6, 7, 6, 1, 0)_{40522} \\ \ell_{1093} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{2773319} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{267329} = PI(16, 6, 10, 6, 1, 0)_{40522} \\ \ell_{1094} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{267319} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{367329} = PI(16, 6, 10, 6, 1, 0)_{40522} \\ \ell_{1094} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{367353} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3673299} = PI(16, 6, 24, 6, 1, 0)_{4052} \\ \ell_{1096} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{3991577} = \begin{bmatrix} 1 & 0 & 0$$

$$\begin{split} \ell_{1102} &= \begin{bmatrix} 1 & 0 & 0 & e^9 \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{12518145} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{12518145} = \mathbf{Pl}(16,6,60,6,1,0)_{43931} \\ \ell_{1103} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^9 \end{bmatrix}_{9855169} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{9855189} = \mathbf{Pl}(16,6,58,6,1,0)_{43805} \\ \ell_{1104} &= \begin{bmatrix} 1 & 0 & 0 & e^3 \\ 0 & 1 & 1 & e^7 \end{bmatrix}_{2133673} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{2132673} = \mathbf{Pl}(16,6,40,6,1,0)_{42671} \\ \ell_{1105} &= \begin{bmatrix} 1 & 0 & 0 & e^{32} \\ 0 & 1 & 1 & e^{36} \end{bmatrix}_{6926209} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{6926209} = \mathbf{Pl}(16,6,46,6,1,0)_{43049} \\ \ell_{1106} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{10122497} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{1597899} = \mathbf{Pl}(16,6,36,6,1,0)_{42419} \\ \ell_{1107} &= \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{5593793} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{5593793} = \mathbf{Pl}(16,6,34,6,1,0)_{42293} \\ \ell_{1109} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{16246209} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{1636393793} = \mathbf{Pl}(16,6,16,1,0)_{40970} \\ \ell_{1110} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{7458881} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{7458881} = \mathbf{Pl}(16,6,16,1,0)_{40944} \\ \ell_{1111} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{3997761} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{3997761} = \mathbf{Pl}(16,6,31,6,1,0)_{41726} \\ \ell_{1113} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{39955297} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{3997729} = \mathbf{Pl}(16,6,21,6,1,0)_{41348} \\ \ell_{1115} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{3063357} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{3667329} = \mathbf{Pl}(16,6,41,6,1,0)_{43238} \\ \ell_{1115} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{36613537} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{3631353} = \mathbf{Pl}(16,6,41,6,1,0)_{43238} \\ \ell_{1115} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{3661249} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{3646337} = \mathbf{Pl}(16,6,41,6,1,0)_{43238} \\ \ell_{1115} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{3661249} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 1 & 1 \end{bmatrix}_{1546337} = \mathbf{Pl}(16,6,47,6,1,0)_{$$

$$\begin{split} \ell_{1123} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{801985} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{801985} = \mathbf{PI}(16, 6, 2, 6, 1, 0)_{40277} \\ \ell_{1124} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{13050433} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{13050433} = \mathbf{PI}(16, 6, 4, 6, 1, 0)_{40403} \\ \ell_{1125} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{5861121} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{5861122} = \mathbf{PI}(16, 6, 14, 6, 1, 0)_{41033} \\ \ell_{1126} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{10652929} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{10652929} = \mathbf{PI}(16, 6, 8, 6, 1, 0)_{40655} \\ \ell_{1127} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{2230816} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{2230561} = \mathbf{PI}(16, 6, 26, 6, 1, 0)_{41789} \\ \ell_{1128} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{2330561} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{2930561} = \mathbf{PI}(16, 6, 28, 6, 1, 0)_{41537} \\ \ell_{1130} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{5326465} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{5326465} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{5326455} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{5326455} = \mathbf{PI}(16, 6, 50, 6, 1, 0)_{43301} \\ \ell_{1133} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{14648321} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{14648321} = \mathbf{PI}(16, 6, 52, 6, 1, 0)_{43477} \\ \ell_{1133} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{14117761} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{14117761} = \mathbf{PI}(16, 6, 52, 6, 1, 0)_{43679} \\ \ell_{1134} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1865217} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1865217} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1865217} = \mathbf{PI}(16, 6, 32, 6, 1, 0)_{42079} \\ \ell_{1135} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{36587841} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 1 & 3 \end{bmatrix}_{2653233} = \mathbf{PI}(16, 6, 32, 6, 1, 0)_{42079} \\ \ell_{1136} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{364657} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{2653233} = \mathbf{PI}(16, 6, 36, 6, 1, 0)_{400404} \\ \ell_{1141} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^$$

$$\begin{split} &\ell_{1144} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{11454913} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{11454913} = \mathbf{PI}(16,6,29,6,1,0)_{41978} \\ &\ell_{1146} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{33850433} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{13850433} = \mathbf{PI}(16,6,23,6,1,0)_{41000} \\ &\ell_{1146} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{11187585} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{11187585} = \mathbf{PI}(16,6,51,6,1,0)_{41222} \\ &\ell_{1147} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{15183105} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{15183105} = \mathbf{PI}(16,6,51,6,1,0)_{43364} \\ &\ell_{1148} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{14915777} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{7989441} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{7989441} = \mathbf{PI}(16,6,53,6,1,0)_{44120} \\ &\ell_{1159} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{3388089} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{7889441} = \mathbf{PI}(16,6,43,6,1,0)_{42860} \\ &\ell_{1152} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{7726209} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{7889421} = \mathbf{PI}(16,6,43,6,1,0)_{42860} \\ &\ell_{1152} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{34703212} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{3386588} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{334657} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{1394620} = \mathbf{PI}(16,6,33,6,1,0)_{42230} \\ &\ell_{1154} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{338657} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{1394620} = \mathbf{PI}(17,44,44,41,0)_{192230} \\ &\ell_{1155} = \begin{bmatrix} 1 & \epsilon^{20} & \epsilon^{20} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11904620} = \begin{bmatrix} 1 & 0 & 0 & 65 \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{2786177} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{11904620} = \mathbf{PI}(17,44,44,41,0)_{192297} \\ &\ell_{1156} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{267393} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{267393} = \mathbf{PI}(17,44,42,44,1,0)_{192297} \\ &\ell_{1169} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{267393} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{267393} = \mathbf{PI}(17,44,63,44,1,0)_{192297} \\ &\ell_{1160} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{49350$$

$$\begin{split} \ell_{1165} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{9} \end{bmatrix}_{7183217} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{7193217} = \mathbf{PI}(17,44,10,44,1,0)_{191604} \\ \ell_{1166} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{9} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{12519489} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{12519489} = \mathbf{PI}(17,44,31,44,1,0)_{192927} \\ \ell_{1167} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{9857025} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{9857025} = \mathbf{PI}(17,44,51,44,1,0)_{194187} \\ \ell_{1168} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{2133185} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{2133185} = \mathbf{PI}(17,44,53,44,1,0)_{194313} \\ \ell_{1169} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{30120005} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{10120065} = \mathbf{PI}(17,44,25,44,1,0)_{192549} \\ \ell_{1170} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{10120005} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{10120065} = \mathbf{PI}(17,44,12,44,1,0)_{191730} \\ \ell_{1171} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1022005} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{1592577} = \mathbf{PI}(17,44,24,41,4,1,0)_{191037} \\ \ell_{1172} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{16247041} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{16247041} = \mathbf{PI}(17,44,20,44,1,0)_{192234} \\ \ell_{1175} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{16247041} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 2^{25} \end{bmatrix}_{10387457} = \mathbf{PI}(17,44,56,44,1,0)_{19480} \\ \ell_{1175} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{10387457} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 5^{25} \end{bmatrix}_{10387457} = \mathbf{PI}(17,44,56,44,1,0)_{19480} \\ \ell_{1177} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{0057217} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 5^{25} \end{bmatrix}_{10387457} = \mathbf{PI}(17,44,56,44,1,0)_{19480} \\ \ell_{1177} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{0057217} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 5^{25} \end{bmatrix}_{0057217} = \mathbf{PI}(17,44,56,44,1,0)_{194185} \\ \ell_{1180} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{0057217} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 5^{25} \end{bmatrix}_{0057217} = \mathbf{PI}(17,44,39,44,1,0)_{193431} \\ \ell_{1180} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{0657215} =$$

$$\begin{split} \ell_{1186} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{32} \end{bmatrix}_{13316865} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{13316865} = \mathbf{PI}(17,44,13,44,1,0)_{191793} \\ \ell_{1187} &= \begin{bmatrix} 1 & 0 & 0 & e^{58} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{302177} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{302177} = \mathbf{PI}(17,44,59,44,1,0)_{190491} \\ \ell_{1188} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{13051521} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{13051521} = \mathbf{PI}(17,44,23,44,1,0)_{192423} \\ \ell_{1189} &= \begin{bmatrix} 1 & 0 & 0 & e^{19} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{5801761} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{5861761} = \mathbf{PI}(17,44,2,44,1,0)_{191302} \\ \ell_{1190} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{12252225} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{1025425} = \mathbf{PI}(17,44,40,44,1,0)_{193872} \\ \ell_{1191} &= \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{12252225} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{12252225} = \mathbf{PI}(17,44,40,44,1,0)_{193494} \\ \ell_{1192} &= \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{61} \end{bmatrix}_{2930881} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{3731073} = \mathbf{PI}(17,44,41,44,41,0)_{192045} \\ \ell_{1194} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{3731073} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{5327233} = \mathbf{PI}(17,44,49,44,1,0)_{194817} \\ \ell_{1195} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{39324481} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{6127105} = \mathbf{PI}(17,44,49,44,1,0)_{194061} \\ \ell_{1197} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{14649665} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{14649665} = \mathbf{PI}(17,44,8,44,1,0)_{194324} \\ \ell_{1199} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{14649665} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{1227105} = \mathbf{PI}(17,44,8,44,1,0)_{194343} \\ \ell_{1199} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{14649665} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{136537} = \mathbf{PI}(17,44,54,44,1,0)_{194439} \\ \ell_{1200} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{2663617} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{4529601} = \mathbf{PI}(17,44,54,44,1,0)_{194439} \\ \ell_{1201} &= \begin{bmatrix} 1 & 0 & 0 & e^{64} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{2663617} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0$$

$$\begin{split} \ell_{1207} &= \begin{bmatrix} 1 & 0 & 0 & e^{30} \\ 0 & 1 & 1 & e^{10} \end{bmatrix}_{14384449} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{14384449} = \mathbf{PI}(17, 44, 5, 44, 1, 0)_{191289} \\ \ell_{1208} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{11452545} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{11452545} = \mathbf{PI}(17, 44, 41, 44, 1, 0)_{19357} \\ \ell_{1209} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{13849665} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{13849665} = \mathbf{PI}(17, 44, 60, 44, 1, 0)_{194754} \\ \ell_{1210} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{11185153} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{11185153} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{15179457} = \mathbf{PI}(17, 44, 48, 44, 1, 0)_{19398} \\ \ell_{1212} &= \begin{bmatrix} 1 & 0 & 0 & e^{12} \\ 0 & 1 & 1 & e^{22} \end{bmatrix}_{1494241} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{1494241} = \mathbf{PI}(17, 44, 28, 44, 1, 0)_{192738} \\ \ell_{1213} &= \begin{bmatrix} 1 & 0 & 0 & e^{49} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{7990849} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{13582209} = \mathbf{PI}(17, 44, 37, 44, 1, 0)_{19309} \\ \ell_{1214} &= \begin{bmatrix} 1 & 0 & 0 & e^{38} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{13582209} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{13582209} = \mathbf{PI}(17, 44, 37, 44, 1, 0)_{19319} \\ \ell_{1215} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{36} \end{bmatrix}_{7725377} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{799849} = \mathbf{PI}(17, 44, 28, 44, 1, 0)_{19319} \\ \ell_{1216} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{6658433} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{6658433} = \mathbf{PI}(17, 44, 26, 44, 1, 0)_{192612} \\ \ell_{1219} &= \begin{bmatrix} 1 & e^{28} & e^{28} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16502525} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{7458369} = \mathbf{PI}(18, 61, 61, 61, 1, 0)_{2602228} \\ \ell_{1221} &= \begin{bmatrix} 1 & 0 & 0 & e^{51} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{12783169} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{7458369} = \mathbf{PI}(18, 61, 66, 61, 1, 0)_{2602228} \\ \ell_{1222} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{12783169} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{12783169} = \mathbf{PI}(18, 61, 61, 61, 61, 1, 0)_{260449} \\ \ell_{1223} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{12783169} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 & 9 \end{bmatrix}_{12783169}$$

$$\ell_{1228} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{3197313} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{3197313} = \mathbf{Pl}(18, 61, 13, 61, 1, 0)_{259267}$$

$$\ell_{1229} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{9} \\ 0 & 1 & 1 & \epsilon^{9} \end{bmatrix}_{7196337} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{7190337} = \mathbf{Pl}(18, 61, 48, 61, 1, 0)_{261472}$$

$$\ell_{1230} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{9} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{12518465} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{12518465} = \mathbf{Pl}(18, 61, 42, 61, 1, 0)_{259834}$$

$$\ell_{1231} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{9856641} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{2133697} = \mathbf{Pl}(18, 61, 43, 61, 1, 0)_{261167}$$

$$\ell_{1232} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{9924929} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{9924929} = \mathbf{Pl}(18, 61, 59, 61, 1, 0)_{262856}$$

$$\ell_{1234} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{10119745} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{5560225} = \mathbf{Pl}(18, 61, 29, 61, 1, 0)_{260866}$$

$$\ell_{1235} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{10198657} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{1598657} = \mathbf{Pl}(18, 61, 29, 61, 1, 0)_{260866}$$

$$\ell_{1236} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{11718657} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{16244609} = \mathbf{Pl}(18, 61, 29, 61, 1, 0)_{260866}$$

$$\ell_{1238} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{11718657} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{16244609} = \mathbf{Pl}(18, 61, 29, 61, 1, 0)_{260966}$$

$$\ell_{1238} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{10386945} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{16244609} = \mathbf{Pl}(18, 61, 29, 61, 1, 0)_{260966}$$

$$\ell_{1238} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{10386945} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10386945} = \mathbf{Pl}(18, 61, 10, 11, 0)_{258511}$$

$$\ell_{1240} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{3997377} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{3997377} = \mathbf{Pl}(18, 61, 2, 61, 1, 0)_{261913}$$

$$\ell_{1241} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{16514369} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{3997377} = \mathbf{Pl}(18, 61, 2, 61, 1, 0)_{26908}$$

$$\ell_{1243} = \begin{bmatrix} 1 &$$

$$\begin{split} \ell_{1249} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{15447553} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{15447553} = PI(18,61,58,61,1,0)_{262102} \\ \ell_{1250} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{13318081} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{13318081} = PI(18,61,7,61,1,0)_{263889} \\ \ell_{1251} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{13050625} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{13050625} = PI(18,61,52,61,1,0)_{261724} \\ \ell_{1252} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{13050625} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{13050625} = PI(18,61,9,61,1,0)_{261019} \\ \ell_{1253} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{5859329} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{13050625} = PI(18,61,47,61,1,0)_{261409} \\ \ell_{1254} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{1065005} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{1065005} = PI(18,61,47,61,1,0)_{26952} \\ \ell_{1255} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{12253057} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{2929665} = PI(18,61,2,61,1,0)_{269524} \\ \ell_{1256} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{3732225} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{3732225} = PI(18,61,2,61,1,0)_{260023} \\ \ell_{1259} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{3732225} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{3732225} = PI(18,61,36,61,1,0)_{260023} \\ \ell_{1259} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{9324225} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{9324225} = PI(18,61,36,61,1,0)_{260506} \\ \ell_{1260} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{9324225} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{6126529} = PI(18,61,36,61,1,0)_{260506} \\ \ell_{1260} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{1468129} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{6126529} = PI(18,61,36,61,1,0)_{260506} \\ \ell_{1260} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1468129} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{6126529} = PI(18,61,36,61,1,0)_{260509} \\ \ell_{1260} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1468129} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{1468117333} = PI(18,61,50,$$

$$\begin{split} \ell_{1270} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{15712705} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{15712705} = \mathbf{PI}(18,61,8,61,1,0)_{258952} \\ \ell_{1271} &= \begin{bmatrix} 1 & 0 & 0 & e^{40} \\ 0 & 1 & 1 & e^{2} \end{bmatrix}_{14380673} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{14380673} = \mathbf{PI}(18,61,24,61,1,0)_{259960} \\ \ell_{1272} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{11451777} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{11451777} = \mathbf{PI}(18,61,37,61,1,0)_{260779} \\ \ell_{1273} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{5} \end{bmatrix}_{13849857} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{13849857} = \mathbf{PI}(18,61,3,61,1,0)_{260354} \\ \ell_{1274} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{11186369} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{11186369} = \mathbf{PI}(18,61,35,61,1,0)_{260354} \\ \ell_{1275} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{61} \end{bmatrix}_{15181889} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{15181889} = \mathbf{PI}(18,61,35,61,1,0)_{260353} \\ \ell_{1277} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{14916737} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{7992769} = \mathbf{PI}(18,61,56,61,1,0)_{260376} \\ \ell_{1278} &= \begin{bmatrix} 1 & 0 & 0 & e^{38} \\ 0 & 1 & 1 & e^{10} \end{bmatrix}_{13585537} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{13585537} = \mathbf{PI}(18,61,21,61,1,0)_{258763} \\ \ell_{1280} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{7932777} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{7992769} = \mathbf{PI}(18,61,21,61,1,0)_{259761} \\ \ell_{1281} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{4795713} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{7723777} = \mathbf{PI}(18,61,21,61,1,0)_{259330} \\ \ell_{1282} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{1335297} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{1335297} = \mathbf{PI}(18,61,51,61,1,0)_{259330} \\ \ell_{1283} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{1335297} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{1335297} = \mathbf{PI}(18,61,51,61,1,0)_{26968} \\ \ell_{1284} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{1325835} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{1335297} = \mathbf{PI}(19,28,29,28,1,0)_{129299} \\ \ell_{1284} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{12786241} = \begin{bmatrix} 1 & 0 & 0 & 4$$

$$\begin{split} \ell_{1291} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{11986433} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{11986433} = PI(19, 28, 53, 28, 1, 0)_{130811} \\ \ell_{1292} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{90} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{3197057} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{3197057} = PI(19, 28, 34, 28, 1, 0)_{120614} \\ \ell_{1293} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{7191809} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{7191809} = PI(19, 28, 62, 28, 1, 0)_{123178} \\ \ell_{1294} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{12517121} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{12517121} = PI(19, 28, 6, 28, 1, 0)_{129110} \\ \ell_{1296} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{2134209} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{2134209} = PI(19, 28, 6, 28, 1, 0)_{130685} \\ \ell_{1297} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10121921} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10121921} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10121921} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{10121921} = PI(19, 28, 47, 28, 1, 0)_{130635} \\ \ell_{1298} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10121921} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{5595009} = PI(19, 28, 23, 28, 1, 0)_{128921} \\ \ell_{1300} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{11720961} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1598529} = PI(19, 28, 37, 28, 1, 0)_{12803} \\ \ell_{1301} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{11720961} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1598529} = PI(19, 28, 12, 28, 1, 0)_{12092} \\ \ell_{1303} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{10503333} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{7456577} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{7456577} = PI(19, 28, 12, 28, 1, 0)_{120992} \\ \ell_{1304} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{1091849} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{105083333} = PI(19, 28, 12, 28, 1, 0)_{120992} \\ \ell_{1305} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{1068097} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{1091849} = PI(19, 28, 12, 28, 1, 0)_{120922} \\ \ell_{1306} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{$$

$$\begin{split} \ell_{1312} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^9 \end{bmatrix}_{15981249} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{15981249} = PI(19, 28, 10, 28, 1, 0)_{128102} \\ \ell_{1313} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{15447937} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{15447937} = PI(19, 28, 46, 28, 1, 0)_{130370} \\ \ell_{1314} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{92} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{13317185} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{13317185} = PI(19, 28, 43, 28, 1, 0)_{130622} \\ \ell_{1315} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{95} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{802305} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{802305} = PI(19, 28, 43, 28, 1, 0)_{130037} \\ \ell_{1316} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{13051585} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{38051585} = PI(19, 28, 55, 28, 1, 0)_{130037} \\ \ell_{1317} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{5806481} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{5806481} = PI(19, 28, 19, 28, 1, 0)_{128609} \\ \ell_{1318} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{10653505} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{12251905} = PI(19, 28, 15, 28, 1, 0)_{128417} \\ \ell_{1320} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{12251905} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{2930241} = PI(19, 28, 38, 28, 1, 0)_{129366} \\ \ell_{1321} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{3731329} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{2930241} = PI(19, 28, 38, 28, 1, 0)_{129366} \\ \ell_{1322} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{3731329} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{5339793} = PI(19, 28, 30, 28, 1, 0)_{129362} \\ \ell_{1323} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{3322369} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{5322369} = PI(19, 28, 30, 28, 1, 0)_{129362} \\ \ell_{1324} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{1414561} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{1414561} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{1414561} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{1414561} = PI(19, 28, 49, 28, 1, 0)_{130397} \\ \ell_{1325} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{1414561} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{14145$$

$$\ell_{1333} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{8258753} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{8238753} = \mathbf{Pl}(19, 28, 54, 28, 1, 0)_{130874}$$

$$\ell_{1334} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{15715457} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{15715457} = \mathbf{Pl}(19, 28, 42, 28, 1, 0)_{13018}$$

$$\ell_{1335} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{14383617} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{14383617} = \mathbf{Pl}(19, 28, 31, 28, 1, 0)_{129425}$$

$$\ell_{1336} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{11453121} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{11453121} = \mathbf{Pl}(19, 28, 32, 28, 1, 0)_{129626}$$

$$\ell_{1337} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13849089} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{13849089} = \mathbf{Pl}(19, 28, 39, 28, 1, 0)_{129929}$$

$$\ell_{1338} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{11188033} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{11188033} = \mathbf{Pl}(19, 28, 59, 28, 1, 0)_{131189}$$

$$\ell_{1339} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{13189117} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{14913153} = \mathbf{Pl}(19, 28, 44, 28, 1, 0)_{130446}$$

$$\ell_{1340} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{8} \end{bmatrix}_{14913153} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{14913153} = \mathbf{Pl}(19, 28, 48, 28, 1, 0)_{130496}$$

$$\ell_{1341} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{80} \end{bmatrix}_{13582273} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{13582273} = \mathbf{Pl}(19, 28, 20, 28, 1, 0)_{13135}$$

$$\ell_{1342} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{7729669} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{7723969} = \mathbf{Pl}(19, 28, 5, 28, 1, 0)_{127787}$$

$$\ell_{1345} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{13566133} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{6661633} = \mathbf{Pl}(19, 28, 5, 28, 1, 0)_{127877}$$

$$\ell_{1346} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{1355499} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{1335489} = \mathbf{Pl}(19, 28, 5, 28, 1, 0)_{127187}$$

$$\ell_{1346} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{1355499} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{1335489} = \mathbf{Pl}(19, 28, 5, 28, 1, 0)_{127187}$$

$$\ell_{1348$$

$$\begin{split} \ell_{1354} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{4} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{4261249} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{4261249} = \mathbf{Pl}(20, 39, 16, 39, 1, 0)_{172140} \\ \ell_{1355} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{11983399} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{11983399} = \mathbf{Pl}(20, 39, 55, 39, 1, 0)_{174597} \\ \ell_{1356} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{3198849} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{3198849} = \mathbf{Pl}(20, 39, 31, 39, 1, 0)_{173085} \\ \ell_{1357} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{7193857} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{7193857} = \mathbf{Pl}(20, 39, 56, 39, 1, 0)_{17460} \\ \ell_{1358} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{9855873} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{2516417} = \mathbf{Pl}(20, 39, 23, 39, 1, 0)_{172581} \\ \ell_{1369} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{9855873} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{2130625} = \mathbf{Pl}(20, 39, 23, 39, 1, 0)_{172581} \\ \ell_{1361} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{9926785} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{9926785} = \mathbf{Pl}(20, 39, 23, 39, 1, 0)_{171573} \\ \ell_{1362} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{10120897} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{10120897} = \mathbf{Pl}(20, 39, 15, 39, 1, 0)_{172077} \\ \ell_{1363} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{10120897} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1599125} = \mathbf{Pl}(20, 39, 25, 39, 1, 0)_{172077} \\ \ell_{1364} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{159425} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1599125} = \mathbf{Pl}(20, 39, 25, 39, 1, 0)_{172077} \\ \ell_{1365} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{159425} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1599125} = \mathbf{Pl}(20, 39, 25, 39, 1, 0)_{172077} \\ \ell_{1366} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{1020897} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1020897} = \mathbf{Pl}(20, 39, 25, 39, 1, 0)_{172077} \\ \ell_{1365} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{1020897} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1020999} = \mathbf{Pl}(20, 39, 25, 39, 1, 0)_{172077} \\ \ell_{1366} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\$$

$$\begin{split} \ell_{1375} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{5063489} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{5063489} = PI(20, 39, 30, 39, 1, 0)_{173022} \\ \ell_{1376} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{15981825} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{15981825} = PI(20, 39, 57, 39, 1, 0)_{174723} \\ \ell_{1377} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{15447745} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{15447745} = PI(20, 39, 49, 39, 1, 0)_{174219} \\ \ell_{1378} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{13317377} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{13317377} = PI(20, 39, 22, 39, 1, 0)_{172518} \\ \ell_{1379} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{69} \end{bmatrix}_{3050817} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{3050733} = PI(20, 39, 29, 39, 1, 0)_{172999} \\ \ell_{1380} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{69} \end{bmatrix}_{3050817} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{5860673} = PI(20, 39, 58, 39, 1, 0)_{17498} \\ \ell_{1382} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{10653121} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{10653121} = PI(20, 39, 21, 39, 1, 0)_{172455} \\ \ell_{1383} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{12251393} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{12251393} = PI(20, 39, 34, 39, 1, 0)_{173274} \\ \ell_{1384} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{2251393} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{3729921} = PI(20, 39, 34, 39, 1, 0)_{171951} \\ \ell_{1385} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{3729921} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{3729921} = PI(20, 39, 37, 39, 1, 0)_{173778} \\ \ell_{1386} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{3233773} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{45289601} = PI(20, 39, 37, 39, 1, 0)_{173463} \\ \ell_{1387} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{1447109} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{6125697} = PI(20, 39, 37, 39, 1, 0)_{173475} \\ \ell_{1391} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{1447199} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1447191} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14471912} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1447191$$

$$\begin{split} \ell_{1396} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^6 \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{8789569} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{8789569} = \mathbf{PI}(20, 39, 4, 39, 1, 0)_{171384} \\ \ell_{1397} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{825937} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{825937} = \mathbf{PI}(20, 39, 12, 39, 1, 0)_{171384} \\ \ell_{1398} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{15715329} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{14381633} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{14381633} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{14381633} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{14381633} = \mathbf{PI}(20, 39, 28, 39, 1, 0)_{172896} \\ \ell_{1400} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{1454337} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{1454337} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{13851585} = \mathbf{PI}(20, 39, 59, 39, 1, 0)_{174345} \\ \ell_{1401} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{1187265} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{13881585} = \mathbf{PI}(20, 39, 51, 39, 1, 0)_{174345} \\ \ell_{1403} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{11187265} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{15181185} = \mathbf{PI}(20, 39, 20, 39, 1, 0)_{172392} \\ \ell_{1404} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{14913601} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{14913601} = \mathbf{PI}(20, 39, 27, 39, 1, 0)_{172329} \\ \ell_{1406} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{13884961} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{13384961} = \mathbf{PI}(20, 39, 39, 39, 1, 0)_{173400} \\ \ell_{1409} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1333889} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{7724865} = \mathbf{PI}(20, 39, 34, 39, 1, 0)_{173400} \\ \ell_{1409} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{133388961} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{7724865} = \mathbf{PI}(20, 39, 39, 39, 1, 0)_{173400} \\ \ell_{1410} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{133388961} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{133388961} = \mathbf{PI}(20, 39, 34, 39, 1, 0)_{173400} \\ \ell_{1410} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{13338896} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{6058689} = \mathbf{$$

$$\begin{split} \ell_{1438} &= \begin{bmatrix} 1 & 0 & 0 & e^{244} \\ 0 & 1 & 1 & e^{49} \end{bmatrix}_{2398657} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{2398657} = PI(21, 15, 58, 15, 1, 0)_{79531} \\ \ell_{1449} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^2 \end{bmatrix}_{15078497} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & e^2 \end{bmatrix}_{15078497} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & e^2 \end{bmatrix}_{15078497} = PI(21, 15, 24, 15, 1, 0)_{77389} \\ \ell_{1441} &= \begin{bmatrix} 1 & 0 & 0 & e^{14} \\ 0 & 1 & 1 & e^{22} \end{bmatrix}_{1547361} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & e^2 \end{bmatrix}_{15447361} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1547361} = PI(21, 15, 9, 15, 1, 0)_{76444} \\ \ell_{1442} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{13316225} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{13316225} = PI(21, 15, 6, 15, 1, 0)_{76525} \\ \ell_{1443} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{13301905} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{362945} = PI(21, 15, 5, 15, 1, 0)_{76592} \\ \ell_{1444} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{3659265} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{3051905} = PI(21, 15, 10, 15, 1, 0)_{76597} \\ \ell_{1446} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{3659265} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{30654657} = PI(21, 15, 27, 15, 1, 0)_{77578} \\ \ell_{1447} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{2932673} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{2235569} = PI(21, 15, 54, 15, 1, 0)_{79468} \\ \ell_{1449} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3729637} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{3729637} = PI(21, 15, 54, 15, 1, 0)_{79377} \\ \ell_{1449} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{3729637} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{3729637} = PI(21, 15, 54, 15, 1, 0)_{79377} \\ \ell_{1450} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{3729637} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{3729637} = PI(21, 15, 54, 15, 1, 0)_{79378} \\ \ell_{1451} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{3929537} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{3729637} = PI(21, 15, 54, 15, 1, 0)_{79378} \\ \ell_{1452} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{3929537} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{3921857} = PI(21, 15, 2, 15,$$

$$\ell_{1459} = \begin{bmatrix} 1 & 0 & 0 & \epsilon \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{535297} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{535297} = \mathbf{PI}(21, 15, 55, 15, 1, 0)_{79342}$$

$$\ell_{1460} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{0} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{8791681} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{8791681} = \mathbf{PI}(21, 15, 56, 15, 1, 0)_{79405}$$

$$\ell_{1461} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{8256897} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{8256897} = \mathbf{PI}(21, 15, 41, 15, 1, 0)_{78460}$$

$$\ell_{1462} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{15712833} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{15712833} = \mathbf{PI}(21, 15, 38, 15, 1, 0)_{78271}$$

$$\ell_{1463} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{14382785} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{14382785} = \mathbf{PI}(21, 15, 4, 15, 1, 0)_{76129}$$

$$\ell_{1464} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{14452009} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{11452009} = \mathbf{PI}(21, 15, 21, 15, 1, 0)_{77200}$$

$$\ell_{1465} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{11185601} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{11185601} = \mathbf{PI}(21, 15, 26, 15, 1, 0)_{77215}$$

$$\ell_{1467} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{15181633} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{15181633} = \mathbf{PI}(21, 15, 33, 15, 1, 0)_{78755}$$

$$\ell_{1469} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{14916161} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{7989249} = \mathbf{PI}(21, 15, 48, 15, 1, 0)_{78961}$$

$$\ell_{1470} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{13581825} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{7989249} = \mathbf{PI}(21, 15, 63, 15, 1, 0)_{78964}$$

$$\ell_{1471} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{13581825} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{7726721} = \mathbf{PI}(21, 15, 63, 15, 1, 0)_{76633}$$

$$\ell_{1472} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{13351825} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13351825} = \mathbf{PI}(21, 15, 63, 15, 1, 0)_{76643}$$

$$\ell_{1472} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{199970} = \begin{bmatrix} 1 & 34 & 34 & 0 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{1999970} = \mathbf{PI}(23, 34, 35, 34, 1, 0)_{153431}$$

$$\ell_{1476} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^$$

$$\begin{split} \ell_{1480} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{6394689} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{6394689} = \mathbf{PI}(22, 34, 43, 34, 1, 0)_{153998} \\ \ell_{1481} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1675881} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{1677881} = \mathbf{PI}(22, 34, 9, 34, 1, 0)_{151856} \\ \ell_{1482} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{4263297} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{4263297} = \mathbf{PI}(22, 34, 14, 34, 1, 0)_{152171} \\ \ell_{1483} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{11984709} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{3198337} = \mathbf{PI}(22, 34, 44, 34, 1, 0)_{154061} \\ \ell_{1485} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{3198337} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{7191169} = \mathbf{PI}(22, 34, 55, 34, 1, 0)_{152612} \\ \ell_{1485} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{7191169} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{319139} = \mathbf{PI}(22, 34, 21, 34, 1, 0)_{152612} \\ \ell_{1487} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{3250193} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{3853377} = \mathbf{PI}(22, 34, 48, 34, 1, 0)_{154313} \\ \ell_{1489} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{2131649} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{2131649} = \mathbf{PI}(22, 34, 28, 34, 1, 0)_{153053} \\ \ell_{1490} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1613137} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{10123137} = \mathbf{PI}(22, 34, 57, 34, 1, 0)_{152234} \\ \ell_{1491} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{10123137} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1599169} = \mathbf{PI}(22, 34, 45, 34, 1, 0)_{152234} \\ \ell_{1493} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1624905} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1777825} = \mathbf{PI}(22, 34, 45, 34, 1, 0)_{1512337} \\ \ell_{1495} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{1024305} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1777825} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1777825} = \mathbf{PI}(22, 34, 45, 34, 1, 0)_{151234} \\ \ell_{1493} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{1024905} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1024905} = \mathbf{PI}(22, 34, 6, 34, 1,$$

$$\begin{split} \ell_{1501} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{31} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{3465793}^{3465793} = \begin{bmatrix} 1 & 0 & 0 & 0 & 1 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{3465793}^{3465793} = \begin{bmatrix} 1 & 0 & 0 & 0 & 0 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{2397057} = \mathbf{PI}(22, 34, 63, 34, 1, 0)_{152486} \\ \ell_{1503} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{5061569} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{5061569} = \mathbf{PI}(22, 34, 19, 34, 1, 0)_{152486} \\ \ell_{1504} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{15980353} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{15980353} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{1548961} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{15448961} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13317697} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13317697} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13317697} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13317697} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{13050753} = \begin{bmatrix} 1 & 0$$

$$\begin{split} \ell_{1522} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{2667073} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{2667073} = \mathbf{PI}(22, 34, 5, 34, 1, 0)_{151004} \\ \ell_{1523} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{535425} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{353425} = \mathbf{PI}(22, 34, 17, 34, 1, 0)_{154502} \\ \ell_{1524} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{8791809} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{8791809} = \mathbf{PI}(22, 34, 51, 34, 1, 0)_{154502} \\ \ell_{1525} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{825881} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{825881} = \mathbf{PI}(22, 34, 52, 34, 1, 0)_{154565} \\ \ell_{1526} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{15714113} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{15714113} = \mathbf{PI}(22, 34, 58, 34, 1, 0)_{154943} \\ \ell_{1527} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{14382337} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{14382337} = \mathbf{PI}(22, 34, 58, 34, 1, 0)_{154943} \\ \ell_{1528} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{11451329} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{13851009} = \mathbf{PI}(22, 34, 58, 34, 1, 0)_{153242} \\ \ell_{1530} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{1185921} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{11185921} = \mathbf{PI}(22, 34, 61, 34, 1, 0)_{153132} \\ \ell_{1531} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{15180225} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{14914561} = \mathbf{PI}(22, 34, 38, 34, 1, 0)_{153683} \\ \ell_{1532} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{14914561} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{14914561} = \mathbf{PI}(22, 34, 33, 34, 1, 0)_{15368641} \\ \ell_{1533} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{14914561} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{13914561} = \mathbf{PI}(22, 34, 33, 34, 1, 0)_{15368641} \\ \ell_{1533} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{1334529} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{7724481} = \mathbf{PI}(22, 34, 43, 34, 1, 0)_{15369} \\ \ell_{1537} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{1334529} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{7724481} = \mathbf{PI}(22, 34, 40, 34, 1, 0)_{15369} \\ \ell_{1538} &= \begin{bmatrix} 1 & 0$$

$$\begin{split} \ell_{1543} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{5} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{8522561} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{8522561} = PI(23,41,26,41,1,0)_{180711} \\ \ell_{1544} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{6394177} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{6394177} = PI(23,41,7,41,1,0)_{181971} \\ \ell_{1545} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{16779457} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 5^{40} \end{bmatrix}_{16779457} = PI(23,41,52,41,1,0)_{181971} \\ \ell_{1546} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{4} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{4264321} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 5^{40} \end{bmatrix}_{4264321} = PI(23,41,52,41,1,0)_{182349} \\ \ell_{1547} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{11987521} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 0 & 1 & 1 & 6^{30} \end{bmatrix}_{1987521} = PI(23,41,29,41,1,0)_{180900} \\ \ell_{1548} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3198081} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{3198081} = PI(23,41,44,41,1,0)_{179955} \\ \ell_{1549} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{7191489} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{12517441} = PI(23,41,61,41,1,0)_{18033} \\ \ell_{1550} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{9855745} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{9855745} = PI(23,41,20,41,1,0)_{18033} \\ \ell_{1553} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{9855745} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{9855745} = PI(23,41,32,41,1,0)_{181089} \\ \ell_{1554} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{10121473} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{10121473} = PI(23,41,52,41,1,0)_{18087} \\ \ell_{1555} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{10121473} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{10121473} = PI(23,41,52,41,1,0)_{18087} \\ \ell_{1556} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{1021473} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{1599041} = PI(23,41,52,41,1,0)_{18087} \\ \ell_{1556} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{11720129} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{1599041} = PI(23,41,52,41,1,0)_{18087} \\ \ell_{1556} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{1745737} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{10245185} = PI$$

$$\begin{split} \ell_{1564} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{16514113} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{16514113} = PI(23, 41, 59, 41, 1, 0)_{182790} \\ \ell_{1565} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{3465089} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{3465089} = PI(23, 41, 33, 41, 1, 0)_{181152} \\ \ell_{1566} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{2397505} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{2397505} = PI(23, 41, 8, 41, 1, 0)_{179577} \\ \ell_{1567} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{50800777} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 2^{13} \end{bmatrix}_{5080077} = PI(23, 41, 21, 41, 1, 0)_{182853} \\ \ell_{1569} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{15465299} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{1546529} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{3316545} = PI(23, 41, 56, 41, 1, 0)_{182601} \\ \ell_{1570} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{33051713} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{33051713} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{3051713} = PI(23, 41, 14, 14, 14, 1, 0)_{180144} \\ \ell_{1574} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{3315545} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 4^{13} \end{bmatrix}_{3051773} = PI(23, 41, 17, 41, 1, 0)_{180144} \\ \ell_{1574} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{10653569} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 2^{13} \end{bmatrix}_{10653569} = PI(23, 41, 34, 41, 1, 0)_{181215} \\ \ell_{1577} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{10653569} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{2931521} = PI(23, 41, 24, 41, 1, 0)_{180424} \\ \ell_{1576} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{3728769} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{3728769} = PI(23, 41, 24, 41, 1, 0)_{180459} \\ \ell_{1578} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3225999} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{2325999} = PI(23, 41, 54, 41, 1, 0)_{180459} \\ \ell_{1581} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1415201} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{2325999} = PI(23, 41, 54, 41, 1, 0)_{180459} \\ \ell_{1582} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1415201} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 &$$

$$\begin{split} \ell_{1585} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{9590017} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{950017} = PI(23,41,2,41,1,0)_{179199} \\ \ell_{1586} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{2666433} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{2666433} = PI(23,41,43,41,1,0)_{181341} \\ \ell_{1587} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{535553} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{535553} = PI(23,41,36,41,1,0)_{181341} \\ \ell_{1588} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{8780697} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{8780697} = PI(23,41,34,11,0)_{18992} \\ \ell_{1599} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{15713537} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{15713537} = PI(23,41,23,41,1,0)_{182979} \\ \ell_{15901} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{14382977} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{14382977} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{14382977} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{14382977} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{13848193} = PI(23,41,10,41,1,0)_{179703} \\ \ell_{1593} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{13848193} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{13848193} = PI(23,41,10,41,1,0)_{180081} \\ \ell_{1594} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{15182849} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{13848193} = PI(23,41,57,41,1,0)_{180064} \\ \ell_{1596} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{15182849} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{14915073} = PI(23,41,3,41,1,0)_{180064} \\ \ell_{1599} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{1395063} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{13930693} = PI(23,41,43,41,1,0)_{1800648} \\ \ell_{1600} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{13545633} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1393089} = PI(23,41,43,41,1,0)_{1800648} \\ \ell_{1600} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{13545633} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{133381633} = PI(23,41,43,41,1,0)_{1800648} \\ \ell_{1600} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{1354099} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{13332099} =$$

$$\begin{split} \ell_{1606} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{12783361} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{12783361} = PI(24, 4, 8, 4, 1, 0)_{32725} \\ \ell_{1607} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{5} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{8522241} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{12783361} = PI(24, 4, 12, 4, 1, 0)_{3297} \\ \ell_{1608} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{6391681} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{6391681} = PI(24, 4, 16, 4, 1, 0)_{33229} \\ \ell_{1609} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{16779649} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{146112} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{11984897} = PI(24, 4, 20, 4, 1, 0)_{3393} \\ \ell_{1612} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{11984897} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{11984897} = PI(24, 4, 28, 4, 1, 0)_{33935} \\ \ell_{1612} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{7193153} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{3195841} = PI(24, 4, 36, 4, 1, 0)_{34237} \\ \ell_{1613} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{7193153} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{12518529} = PI(24, 4, 40, 4, 1, 0)_{34711} \\ \ell_{1615} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{21318529} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{2130561} = PI(24, 4, 48, 4, 1, 0)_{35245} \\ \ell_{1617} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{6927361} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{6927361} = PI(24, 4, 56, 4, 1, 0)_{35497} \\ \ell_{1619} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{1023201} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{5594241} = PI(24, 4, 33, 4, 1, 0)_{34500} \\ \ell_{1622} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{11230961} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1123091} = PI(24, 4, 41, 4, 1, 0)_{34501} \\ \ell_{1629} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11718081} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{11718081} = PI(24, 4, 37, 4, 1, 0)_{34502} \\ \ell_{1624} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{16246017} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{11718081} = PI(24, 4, 43, 4, 1, 0)_{34500} \\ \ell_{1624} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{2$$

$$\begin{split} \ell_{1627} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{37} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{10919617} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{10919617} = \mathbf{Pl}(24, 4, 61, 4, 1, 0)_{36064} \\ \ell_{1628} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^2 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1065281} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1065281} = \mathbf{Pl}(24, 4, 1, 4, 1, 0)_{32284} \\ \ell_{1629} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{31} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{3463681} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{3463681} = \mathbf{Pl}(24, 4, 9, 4, 1, 0)_{32788} \\ \ell_{1630} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{2398401} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{2398401} = \mathbf{Pl}(24, 4, 13, 4, 1, 0)_{33040} \\ \ell_{1631} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{15979201} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{15979201} = \mathbf{Pl}(24, 4, 17, 4, 1, 0)_{33292} \\ \ell_{1632} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{15979201} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{15449601} = \mathbf{Pl}(24, 4, 25, 4, 1, 0)_{33796} \\ \ell_{1633} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{13319041} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{13319041} = \mathbf{Pl}(24, 4, 29, 4, 1, 0)_{34048} \\ \ell_{1633} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{303173} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{13319041} = \mathbf{Pl}(24, 4, 35, 4, 1, 0)_{34048} \\ \ell_{1635} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{30350177} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{3050177} = \mathbf{Pl}(24, 4, 39, 4, 1, 0)_{34426} \\ \ell_{1636} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{3050177} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{3050177} = \mathbf{Pl}(24, 4, 39, 4, 1, 0)_{34930} \\ \ell_{1638} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{10652801} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{10652801} = \mathbf{Pl}(24, 4, 55, 4, 1, 0)_{35182} \\ \ell_{1649} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{22850333} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{2932033} = \mathbf{Pl}(24, 4, 55, 4, 1, 0)_{35636} \\ \ell_{1641} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{3922689} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{3731521} = \mathbf{Pl}(24, 4, 5, 4, 1, 0)_{35636} \\ \ell_{1645} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{1449089} = \begin{bmatrix}$$

$$\begin{split} \ell_{1648} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{1866753} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{1866733} = \mathbf{PI}(24, 4, 23, 4, 1, 0)_{33670} \\ \ell_{1649} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{9087521} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{9587521} = \mathbf{PI}(24, 4, 27, 4, 1, 0)_{33922} \\ \ell_{1650} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{2666241} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{2666241} = \mathbf{PI}(24, 4, 31, 4, 1, 0)_{34174} \\ \ell_{1651} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{355681} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{355681} = \mathbf{PI}(24, 4, 2, 4, 1, 0)_{32347} \\ \ell_{1652} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{8789057} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{8789057} = \mathbf{PI}(24, 4, 6, 4, 1, 0)_{32599} \\ \ell_{1653} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{8258433} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{8258433} = \mathbf{PI}(24, 4, 10, 4, 1, 0)_{32591} \\ \ell_{1654} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{15714369} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{13484911} = \mathbf{PI}(24, 4, 18, 4, 1, 0)_{33355} \\ \ell_{1655} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{14384921} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{1453249} = \mathbf{PI}(24, 4, 22, 4, 1, 0)_{33607} \\ \ell_{1657} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{13484941} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{13484941} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{13484941} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{13483921} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{11183487} = \mathbf{PI}(24, 4, 30, 4, 1, 0)_{34111} \\ \ell_{1659} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{11433291} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{15180737} = \mathbf{PI}(24, 4, 34, 4, 1, 0)_{3463} \\ \ell_{1660} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{19433921} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{19433921} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{19433921} = \mathbf{PI}(24, 4, 50, 4, 1, 0)_{34867} \\ \ell_{1660} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{36059921} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{16772990} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{0$$

$$\begin{split} \ell_{1669} &= \begin{bmatrix} 1 & 0 & 0 & 0 & 1 \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{267905} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{267905} = \mathbf{Pl}(25,62,62,62,62,1,0)_{266330} \\ \ell_{1670} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{12786433} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{12786433} = \mathbf{Pl}(25,62,29,62,1,0)_{264629} \\ \ell_{1671} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{8524289} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{8524289} = \mathbf{Pl}(25,62,35,62,1,0)_{264629} \\ \ell_{1672} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{6393217} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{6393217} = \mathbf{Pl}(25,62,58,62,1,0)_{26678} \\ \ell_{1673} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{16778689} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{16778689} = \mathbf{Pl}(25,62,39,62,1,0)_{264881} \\ \ell_{1674} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{16778699} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{4262145} = \mathbf{Pl}(25,62,39,62,1,0)_{263999} \\ \ell_{1676} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{3196609} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{11987619} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{11987619} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{3196609} = \mathbf{Pl}(25,62,43,62,1,0)_{263133} \\ \ell_{1678} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{12517057} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{3196609} = \mathbf{Pl}(25,62,43,62,1,0)_{265313} \\ \ell_{1679} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{12517057} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{21517057} = \mathbf{Pl}(25,62,43,62,1,0)_{265325} \\ \ell_{1680} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{10121537} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{2131073} = \mathbf{Pl}(25,62,50,62,1,0)_{265385} \\ \ell_{1682} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{10121537} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10121537} = \mathbf{Pl}(25,62,47,62,1,0)_{265349} \\ \ell_{1683} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{10121537} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{11719873} = \mathbf{Pl}(25,62,40,21,0)_{265389} \\ \ell_{1685} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{1601345} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{11719873} = \mathbf{Pl}(25,62,40$$

$$\begin{split} \ell_{1090} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{9056001} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{9056001} = \mathbf{Pl}(25, 62, 13, 62, 1, 0)_{263243} \\ \ell_{1691} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & 5 \end{bmatrix}_{10922411} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{10922411} = \mathbf{Pl}(25, 62, 51, 62, 1, 0)_{26537} \\ \ell_{1692} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{16510913} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{16510913} = \mathbf{Pl}(25, 62, 1, 62, 1, 0)_{262487} \\ \ell_{1693} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{31} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{3463361} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{3463361} = \mathbf{Pl}(25, 62, 34, 62, 1, 0)_{26456} \\ \ell_{1694} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{2307053} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{5063809} = \mathbf{Pl}(25, 62, 28, 62, 1, 0)_{264188} \\ \ell_{1696} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{15981505} = \begin{bmatrix} 1 & 0 & 0 & 69 \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{15445889} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{15316097} = \mathbf{Pl}(25, 62, 24, 62, 1, 0)_{263936} \\ \ell_{1698} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{13316097} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{13316097} = \mathbf{Pl}(25, 62, 38, 62, 1, 0)_{264188} \\ \ell_{1699} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{13051265} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{13051265} = \mathbf{Pl}(25, 62, 24, 62, 1, 0)_{263117} \\ \ell_{1700} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{13051265} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{3051265} = \mathbf{Pl}(25, 62, 24, 62, 1, 0)_{263117} \\ \ell_{1701} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10251329} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{3051265} = \mathbf{Pl}(25, 62, 24, 62, 1, 0)_{263117} \\ \ell_{1703} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{32251329} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{32251329} = \mathbf{Pl}(25, 62, 24, 62, 1, 0)_{263369} \\ \ell_{1704} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{32251329} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{32251329} = \mathbf{Pl}(25, 62, 15, 62, 1, 0)_{263518} \\ \ell_{1705} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{372169} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{3732161} = \mathbf{Pl}(25, 62, 16,$$

$$\begin{split} \ell_{1711} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{4528001} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{4528001} = \mathbf{Pl}(25, 62, 66, 2, 1, 0)_{264062} \\ \ell_{1712} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{1867073} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{1867073} = \mathbf{Pl}(25, 62, 36, 62, 1, 0)_{264692} \\ \ell_{1713} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{9589825} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{9589825} = \mathbf{Pl}(25, 62, 7, 62, 1, 0)_{262863} \\ \ell_{1714} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{2666625} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{2666625} = \mathbf{Pl}(25, 62, 57, 62, 1, 0)_{266015} \\ \ell_{1715} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{8791109} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{8791169} = \mathbf{Pl}(25, 62, 31, 62, 1, 0)_{264503} \\ \ell_{1717} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{67} \end{bmatrix}_{8258497} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{8791169} = \mathbf{Pl}(25, 62, 33, 62, 1, 0)_{264503} \\ \ell_{1718} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{67} \end{bmatrix}_{15713793} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{15713793} = \mathbf{Pl}(25, 62, 60, 62, 1, 0)_{266204} \\ \ell_{1719} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{14381121} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{14351649} = \mathbf{Pl}(25, 62, 37, 62, 1, 0)_{264755} \\ \ell_{1720} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{13851457} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{13851457} = \mathbf{Pl}(25, 62, 62, 62, 1, 0)_{262802} \\ \ell_{1722} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{11185793} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{13851457} = \mathbf{Pl}(25, 62, 52, 62, 1, 0)_{263954} \\ \ell_{1724} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{14916481} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{14916481} = \mathbf{Pl}(25, 62, 52, 62, 1, 0)_{263954} \\ \ell_{1724} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{7991745} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{7722945} = \mathbf{Pl}(25, 62, 48, 62, 1, 0)_{265965} \\ \ell_{1727} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{7991745} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{7722945} = \mathbf{Pl}(25, 62, 45, 62, 1, 0)_{265965} \\ \ell_{1729} &= \begin{bmatrix} 1 & 0 & 0 &$$

$$\ell_{1732} = \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{3} \\ 2397249 \end{bmatrix} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{2397249} = \mathbf{Pl}(26, 13, 12, 13, 1, 0)_{68700}$$

$$\ell_{1733} = \begin{bmatrix} 1 & 0 & 0 & e^{92} \\ 0 & 1 & 1 & e^{31} \\ 12783425 \end{bmatrix}_{12783425} = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & 13 \\ 12783425 \end{bmatrix} = \mathbf{Pl}(26, 13, 26, 13, 1, 0)_{69582}$$

$$\ell_{1734} = \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{31} \\ 12783425 \end{bmatrix}_{12783425} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 13 \\ 12783425 \end{bmatrix} = \mathbf{Pl}(26, 13, 26, 13, 1, 0)_{69582}$$

$$\ell_{1735} = \begin{bmatrix} 1 & 0 & 0 & e^{65} \\ 0 & 1 & 1 & e^{37} \\ 0 & 1 & 1$$

$$\begin{split} \ell_{1753} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{3997953} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{3997953} = \mathbf{Pl}(26, 13, 43, 13, 1, 0)_{70653} \\ \ell_{1754} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{9056193} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{9056193} = \mathbf{Pl}(26, 13, 60, 13, 1, 0)_{71724} \\ \ell_{1755} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1005793} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{10920577} = \mathbf{Pl}(26, 13, 49, 13, 1, 0)_{71031} \\ \ell_{1756} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1005793} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1005793} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{16513025} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{3462017} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{3462017} = \mathbf{Pl}(26, 13, 22, 13, 1, 0)_{6930} \\ \ell_{1759} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{5060417} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{5060417} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{15979649} = \mathbf{Pl}(26, 13, 34, 13, 1, 0)_{70086} \\ \ell_{1760} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{15448385} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{15979649} = \mathbf{Pl}(26, 13, 53, 13, 1, 0)_{71283} \\ \ell_{1761} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{13318849} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{15448385} = \mathbf{Pl}(26, 13, 36, 13, 1, 0)_{71472} \\ \ell_{1763} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{300360} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{13050369} = \mathbf{Pl}(26, 13, 36, 13, 1, 0)_{71472} \\ \ell_{1764} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{13050369} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{13050369} = \mathbf{Pl}(26, 13, 51, 13, 1, 0)_{7157} \\ \ell_{1767} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{12250369} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{10655937} = \mathbf{Pl}(26, 13, 51, 13, 1, 0)_{7157} \\ \ell_{1769} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{3731265} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{3321899} = \mathbf{Pl}(26, 13, 51, 13, 1, 0)_{68952} \\ \ell_{1776} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{3731265} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{3731265} = \mathbf{Pl}(26, 13, 51, 31, 0$$

$$\begin{split} \ell_{1774} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{14116033} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{14116033} = \mathbf{PI}(26,13,58,13,1,0)_{71598} \\ \ell_{1775} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{4531137} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{4531137} = \mathbf{PI}(26,13,25,13,1,0)_{69519} \\ \ell_{1776} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{8} \end{bmatrix}_{1866625} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{1866625} = \mathbf{PI}(26,13,20,13,1,0)_{69204} \\ \ell_{1777} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{9588993} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{9588993} = \mathbf{PI}(26,13,313,1,0)_{68133} \\ \ell_{1778} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{2665473} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{558933} = \mathbf{PI}(26,13,14,13,1,0)_{71346} \\ \ell_{1789} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{535937} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{5791297} = \mathbf{PI}(26,13,54,13,1,0)_{71346} \\ \ell_{1781} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{8256133} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{8256513} = \mathbf{PI}(26,13,44,13,1,0)_{70716} \\ \ell_{1782} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{15715073} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 1 & 61 \end{bmatrix}_{15715073} = \mathbf{PI}(26,13,21,31,1,0)_{68870} \\ \ell_{1784} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{11452417} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{11452417} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{13483665} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{13453695} = \mathbf{PI}(26,13,21,13,1,0)_{69456} \\ \ell_{1785} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{13179649} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{11457247} = \mathbf{PI}(26,13,37,13,1,0)_{70927} \\ \ell_{1787} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{131996995} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{11457247} = \mathbf{PI}(26,13,21,13,1,0)_{69456} \\ \ell_{1786} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{131996995} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{11457247} = \mathbf{PI}(26,13,37,13,1,0)_{70927} \\ \ell_{1787} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{139950995} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{19950995} = \mathbf{PI}(26,13,37,13,1,$$

$$\begin{split} \ell_{1795} &= \begin{bmatrix} 1 & \epsilon^{34} & \epsilon^{34} & 0 \\ 0 & 0 & 1 \end{bmatrix}_{2438345} = \begin{bmatrix} 1 & 9 & 9 & 0 \\ 0 & 0 & 1 \end{bmatrix}_{2438345} = \mathbf{Pl}(0,9,0,9,1,0)_{13441} \\ \ell_{1796} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3462721} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{3462721} = \mathbf{Pl}(27,9,8,9,1,0)_{52673} \\ \ell_{1707} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{268033} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{12786497} = \mathbf{Pl}(27,9,8,9,1,0)_{52636} \\ \ell_{1798} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{12786497} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{12786497} = \mathbf{Pl}(27,9,18,9,1,0)_{53203} \\ \ell_{1799} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{8522305} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{12786497} = \mathbf{Pl}(27,9,27,9,1,0)_{53770} \\ \ell_{1800} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{16777601} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{4264193} = \mathbf{Pl}(27,9,36,9,1,0)_{54337} \\ \ell_{1801} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{16777601} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{1984001} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{11984001} = \mathbf{Pl}(27,9,63,9,1,0)_{54052} \\ \ell_{1803} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{3197121} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{199401} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{11984001} = \mathbf{Pl}(27,9,32,9,1,0)_{54052} \\ \ell_{1805} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{12519553} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{12519553} = \mathbf{Pl}(27,9,50,9,1,0)_{55786} \\ \ell_{1807} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{2132097} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{9555233} = \mathbf{Pl}(27,9,50,9,1,0)_{52822} \\ \ell_{1808} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{2132097} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{2132097} = \mathbf{Pl}(27,9,50,9,1,0)_{52824} \\ \ell_{1810} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{2132097} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{2132097} = \mathbf{Pl}(27,9,50,9,1,0)_{52824} \\ \ell_{1811} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{5594561} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{15192753} = \mathbf{Pl}(27,9,58,9,1,0)_{55282} \\ \ell_{1813} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 &$$

$$\begin{split} \ell_{1816} &= \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{10388481} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{10388481} = \mathbf{PI}(27, 9, 23, 9, 1, 0)_{53518} \\ \ell_{1817} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{14} \end{bmatrix}_{3998273} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{3998273} = \mathbf{PI}(27, 9, 30, 9, 1, 0)_{53959} \\ \ell_{1818} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{10} \end{bmatrix}_{9058369} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{9058369} = \mathbf{PI}(27, 9, 5, 9, 1, 0)_{52384} \\ \ell_{1819} &= \begin{bmatrix} 1 & 0 & 0 & e^{37} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{10918977} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{10918977} = \mathbf{PI}(27, 9, 12, 9, 1, 0)_{52825} \\ \ell_{1820} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{41} \end{bmatrix}_{16512641} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{166049} = \mathbf{PI}(27, 9, 19, 9, 1, 0)_{5326} \\ \ell_{1821} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{41} \end{bmatrix}_{16512641} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{16512641} = \mathbf{PI}(27, 9, 19, 9, 1, 0)_{5326} \\ \ell_{1823} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{5661377} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{15980929} = \mathbf{PI}(27, 9, 62, 9, 1, 0)_{55975} \\ \ell_{1824} &= \begin{bmatrix} 1 & 0 & 0 & e^{14} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{15980929} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{15980929} = \mathbf{PI}(27, 9, 55, 9, 1, 0)_{55534} \\ \ell_{1825} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{13315905} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{13315905} = \mathbf{PI}(27, 9, 37, 9, 1, 0)_{54400} \\ \ell_{1827} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{13051329} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{15446721} = \mathbf{PI}(27, 9, 28, 9, 1, 0)_{53392} \\ \ell_{1829} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{13051329} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{30513379} = \mathbf{PI}(27, 9, 21, 9, 1, 0)_{53332} \\ \ell_{1830} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{12252545} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{12653377} = \mathbf{PI}(27, 9, 28, 9, 1, 0)_{53332} \\ \ell_{1831} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{12252545} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{12653377} = \mathbf{PI}(27, 9, 42, 9, 1, 0)_{54715} \\ \ell_{1833} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56$$

$$\begin{split} \ell_{1837} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{14648577} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{14648577} = \mathbf{PI}(27, 9, 60, 9, 1, 0)_{55849} \\ \ell_{1838} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{14116865} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{14116865} = \mathbf{PI}(27, 9, 53, 9, 1, 0)_{55408} \\ \ell_{1839} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{9} \end{bmatrix}_{4530177} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{4530177} = \mathbf{PI}(27, 9, 10, 9, 1, 0)_{52699} \\ \ell_{1840} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{5} \end{bmatrix}_{1860177} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{1866177} = \mathbf{PI}(27, 9, 3, 9, 1, 0)_{52258} \\ \ell_{1841} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{9587201} &= \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{9587201} = \mathbf{PI}(27, 9, 24, 9, 1, 0)_{53140} \\ \ell_{1842} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{536065} &= \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{2665857} &= \mathbf{PI}(27, 9, 17, 9, 1, 0)_{53140} \\ \ell_{1843} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{8789185} &= \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{8789185} &= \mathbf{PI}(27, 9, 52, 9, 1, 0)_{55912} \\ \ell_{1844} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{8789185} &= \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{8256321} &= \mathbf{PI}(27, 9, 38, 9, 1, 0)_{54463} \\ \ell_{1845} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{14380801} &= \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{14380801} &= \mathbf{PI}(27, 9, 16, 9, 1, 0)_{5307} \\ \ell_{1848} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14380801} &= \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{14380801} &= \mathbf{PI}(27, 9, 25, 9, 1, 0)_{53044} \\ \ell_{1849} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{13850881} &= \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{11455041} &= \mathbf{PI}(27, 9, 25, 9, 1, 0)_{53044} \\ \ell_{1850} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{13183199} &= \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{14915521} &= \mathbf{PI}(27, 9, 29, 9, 1, 0)_{53044} \\ \ell_{1853} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{15183199} &= \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{14915521} &= \mathbf{PI}(27, 9, 29, 9, 1, 0)_{53044} \\ \ell_{1855} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 &$$

$$\begin{split} \ell_{1858} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{1332029} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{1332029} = PI(27, 9, 34, 9, 1, 0)_{54211} \\ \ell_{1859} &= \begin{bmatrix} 1 & \epsilon^{22} & \epsilon^{22} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5142995} = \begin{bmatrix} 1 & 19 & 19 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5142995} = PI(0, 19, 0, 19, 1, 0)_{14721} \\ \ell_{1860} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{15982145} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{1592145} = PI(28, 19, 18, 19, 1, 0)_{92894} \\ \ell_{1861} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{268097} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{268097} = PI(28, 19, 19, 19, 1, 0)_{92057} \\ \ell_{1862} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{12783489} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{2783489} = PI(28, 19, 38, 19, 1, 0)_{94154} \\ \ell_{1863} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{3824481} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{38524481} = PI(28, 19, 53, 19, 1, 0)_{95099} \\ \ell_{1864} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{1678753} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{16778753} = PI(28, 19, 45, 19, 1, 0)_{95666} \\ \ell_{1865} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{4263233} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{4263233} = PI(28, 19, 11, 19, 1, 0)_{92453} \\ \ell_{1868} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11839337} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1939343} = PI(28, 19, 24, 19, 1, 0)_{93272} \\ \ell_{1869} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1939343} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1939343} = PI(28, 19, 29, 19, 1, 0)_{93477} \\ \ell_{1879} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1939343} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{1939373} = PI(28, 19, 29, 19, 1, 0)_{93272} \\ \ell_{1870} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{9855681} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{9855681} = PI(28, 19, 29, 19, 1, 0)_{932642} \\ \ell_{1871} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{21336609} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{21332609} = PI(28, 19, 21, 10, 10)_{932642} \\ \ell_{1874} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10119681} = \begin{bmatrix} 1$$

$$\begin{split} \ell_{1879} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{7457921} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{7457921} = \mathbf{Pl}(28, 19, 34, 19, 1, 0)_{93902} \\ \ell_{1880} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{8} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{10387777} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{10387777} = \mathbf{Pl}(28, 19, 58, 19, 1, 0)_{95414} \\ \ell_{1881} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3996033} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{3996033} = \mathbf{Pl}(28, 19, 41, 19, 1, 0)_{94343} \\ \ell_{1882} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{9055553} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{9055553} = \mathbf{Pl}(28, 19, 28, 19, 1, 0)_{93524} \\ \ell_{1883} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10019809} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{10019809} = \mathbf{Pl}(28, 19, 15, 19, 1, 0)_{94205} \\ \ell_{1884} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{106305} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{1066305} = \mathbf{Pl}(28, 19, 44, 19, 1, 0)_{94532} \\ \ell_{1885} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{16511169} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{16511169} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{364961} = \mathbf{Pl}(28, 19, 10, 19, 1, 0)_{92390} \\ \ell_{1887} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{1640913} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{2400705} = \mathbf{Pl}(28, 19, 25, 19, 1, 0)_{93335} \\ \ell_{1889} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{15446913} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{15446913} = \mathbf{Pl}(28, 19, 39, 19, 1, 0)_{94217} \\ \ell_{1890} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13318657} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{3318657} = \mathbf{Pl}(28, 19, 52, 19, 1, 0)_{93086} \\ \ell_{1891} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13505049} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{13050049} = \mathbf{Pl}(28, 19, 3, 19, 1, 0)_{94264} \\ \ell_{1894} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{12252033} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{12252033} = \mathbf{Pl}(28, 19, 3, 19, 1, 0)_{94461} \\ \ell_{1895} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{12252033} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{12252033} = \mathbf{Pl}(28, 19, 3,$$

$$\begin{split} \ell_{1900} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{6126017} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{6126017} = \mathbf{PI}(28, 19, 6, 19, 1, 0)_{92138} \\ \ell_{1901} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{14650497} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{14650497} = \mathbf{PI}(28, 19, 51, 19, 1, 0)_{94973} \\ \ell_{1902} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{14114305} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{14114305} = \mathbf{PI}(28, 19, 32, 19, 1, 0)_{9376} \\ \ell_{1903} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{4530817} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{4530817} = \mathbf{PI}(28, 19, 56, 19, 1, 0)_{95288} \\ \ell_{1904} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{1867521} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{1867521} = \mathbf{PI}(28, 19, 43, 19, 1, 0)_{94469} \\ \ell_{1905} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{9590657} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{9590657} = \mathbf{PI}(28, 19, 30, 19, 1, 0)_{93650} \\ \ell_{1906} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{9590657} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{2664705} = \mathbf{PI}(28, 19, 30, 19, 1, 0)_{93650} \\ \ell_{1907} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{5791553} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{556193} = \mathbf{PI}(28, 19, 57, 19, 1, 0)_{93416} \\ \ell_{1909} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{8258625} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{8791553} = \mathbf{PI}(28, 19, 31, 19, 1, 0)_{93713} \\ \ell_{1910} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{13712449} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{14382913} = \mathbf{PI}(28, 19, 21, 19, 1, 0)_{93020} \\ \ell_{1911} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{14353933} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{14353933} = \mathbf{PI}(28, 19, 2, 19, 1, 0)_{93020} \\ \ell_{1913} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1187905} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{11187905} = \mathbf{PI}(28, 19, 2, 19, 1, 0)_{9408} \\ \ell_{1914} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{14915841} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{11187905} = \mathbf{PI}(28, 19, 2, 19, 1, 0)_{94281} \\ \ell_{1916} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1$$

$$\begin{split} \ell_{1921} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{6630329} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{6659329} = \mathbf{PI}(28, 19, 9, 19, 1, 0)_{92327} \\ \ell_{1922} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{1332353} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{1332353} = \mathbf{PI}(28, 19, 26, 19, 1, 0)_{93398} \\ \ell_{1923} &= \begin{bmatrix} 1 & \epsilon^{50} & \epsilon^{50} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16239060} = \begin{bmatrix} 1 & 60 & 60 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16239060} = \mathbf{PI}(0, 60, 0, 60, 1, 0)_{19660} \\ \ell_{1924} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{268161} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{5060929} = \mathbf{PI}(29, 60, 61, 60, 1, 0)_{25833} \\ \ell_{1925} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{12786561} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{12786561} = \mathbf{PI}(29, 60, 25, 60, 1, 0)_{256065} \\ \ell_{1927} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{5} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{6393281} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{6393281} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{6393281} = \mathbf{PI}(29, 60, 50, 60, 1, 0)_{25607} \\ \ell_{1929} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{16779585} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{6393281} = \mathbf{PI}(29, 60, 50, 60, 1, 0)_{25740} \\ \ell_{1931} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{16779585} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{1986305} = \mathbf{PI}(29, 60, 33, 60, 1, 0)_{255939} \\ \ell_{1931} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{11986305} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{1986305} = \mathbf{PI}(29, 60, 23, 60, 1, 0)_{255939} \\ \ell_{1932} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1837938} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1937938} = \mathbf{PI}(29, 60, 23, 60, 1, 0)_{255939} \\ \ell_{1931} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1937939} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1937939} = \mathbf{PI}(29, 60, 28, 60, 1, 0)_{255939} \\ \ell_{1934} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{133121} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{12317505} = \mathbf{PI}(29, 60, 28, 60, 1, 0)_{25696} \\ \ell_{1935} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{2133121} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{982341} = \mathbf{PI}(29, 6$$

$$\begin{split} \ell_{1942} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{16246337} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{16246337} = \mathbf{PI}(29,60,19,60,1,0)_{255687} \\ \ell_{1943} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{7457153} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{7457153} = \mathbf{PI}(29,60,47,60,1,0)_{257451} \\ \ell_{1944} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{8} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{10389505} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{3986097} = \mathbf{PI}(29,60,46,01,0)_{258018} \\ \ell_{1945} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{3996097} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{3996097} = \mathbf{PI}(29,60,4,60,1,0)_{254742} \\ \ell_{1946} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{3996097} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{9957473} = \mathbf{PI}(29,60,33,60,1,0)_{256569} \\ \ell_{1947} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{10923305} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{10922305} = \mathbf{PI}(29,60,29,60,1,0)_{256317} \\ \ell_{1948} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{1066561} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{1066561} = \mathbf{PI}(29,60,51,60,1,0)_{25703} \\ \ell_{1949} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{3464129} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{3464129} = \mathbf{PI}(29,60,22,60,1,0)_{255876} \\ \ell_{1950} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{24002577} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{15978305} = \mathbf{PI}(29,60,36,60,1,0)_{25453} \\ \ell_{1953} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{15448577} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{15978305} = \mathbf{PI}(29,60,36,60,1,0)_{256758} \\ \ell_{1954} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{13051137} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{1305137} = \mathbf{PI}(29,60,36,60,1,0)_{255750} \\ \ell_{1955} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{13051137} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{1054777} = \mathbf{PI}(29,60,46,60,1,0)_{255750} \\ \ell_{1955} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{3051137} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{10654273} = \mathbf{PI}(29,60,46,60,1,0)_{255750} \\ \ell_{1955} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{2930177} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0$$

$$\begin{split} \ell_{1963} &= \begin{bmatrix} 1 & 0 & 0 & e^{7} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{9323457} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{9323457} = PI(29,60,17,60,1,0)_{255561} \\ \ell_{1964} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{0126441} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{1225441} = PI(29,60,45,60,1,0)_{257325} \\ \ell_{1965} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{14647489} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{14647489} = PI(29,60,8,60,1,0)_{254934} \\ \ell_{1966} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{14117569} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{14117569} = PI(29,60,52,60,1,0)_{257766} \\ \ell_{1967} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{1417569} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{4529729} = PI(29,60,35,60,1,0)_{256405} \\ \ell_{1968} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{1867329} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{1887329} = PI(29,60,31,60,1,0)_{256443} \\ \ell_{1969} &= \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{556321} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{556321} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{2664065} = PI(29,60,6,60,1,0)_{254868} \\ \ell_{1971} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{536321} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{536321} = PI(29,60,3,60,1,0)_{25632} \\ \ell_{1973} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{3258305} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{3258305} = PI(29,60,3,60,1,0)_{25493} \\ \ell_{1974} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{33855051} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{15715201} = PI(29,60,3,60,1,0)_{25493} \\ \ell_{1976} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{11451457} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{1186497} = PI(29,60,36,01,0)_{25493} \\ \ell_{1978} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{11451457} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{1186497} = PI(29,60,59,60,1,0)_{25493} \\ \ell_{1978} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{11451457} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 1 & 6 \end{bmatrix}_{1186497} = PI(29,60,59,60,1,0)_{255057} \\ \ell_{1979} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{1186497} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0$$

$$\begin{split} \ell_{1984} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{4794433} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{4794433} = \mathbf{Pl}(29, 60, 21, 60, 1, 0)_{255813} \\ \ell_{1985} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{6657729} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{6657729} = \mathbf{Pl}(29, 60, 48, 60, 1, 0)_{255246} \\ \ell_{1986} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{1332033} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{1332033} = \mathbf{Pl}(29, 60, 12, 60, 1, 0)_{255246} \\ \ell_{1987} &= \begin{bmatrix} 1 & \epsilon^{14} & \epsilon^{14} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15691130} = \begin{bmatrix} 1 & 58 & 58 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15691130} = \mathbf{Pl}(0, 58, 0, 58, 1, 0)_{19713} \\ \ell_{1988} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{13318465} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{13318465} = \mathbf{Pl}(30, 58, 59, 58, 1, 0)_{250207} \\ \ell_{1999} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{268225} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{268225} = \mathbf{Pl}(30, 58, 58, 58, 1, 0)_{250207} \\ \ell_{1990} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{37283533} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{3522369} = \mathbf{Pl}(30, 58, 47, 58, 1, 0)_{247876} \\ \ell_{1991} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{334817} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{6394817} = \mathbf{Pl}(30, 58, 42, 58, 1, 0)_{240199} \\ \ell_{1993} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{3394817} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{4261185} = \mathbf{Pl}(30, 58, 63, 58, 1, 0)_{247561} \\ \ell_{1994} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{11987713} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{4261185} = \mathbf{Pl}(30, 58, 63, 58, 1, 0)_{240868} \\ \ell_{1996} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{11987713} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{1398713} = \mathbf{Pl}(30, 58, 53, 58, 1, 0)_{240868} \\ \ell_{1997} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{11987713} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{1997133} = \mathbf{Pl}(30, 58, 53, 58, 1, 0)_{247892} \\ \ell_{1999} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{11987713} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1191553} = \mathbf{Pl}(30, 58, 3, 58, 1, 0)_{247892} \\ \ell_{1999} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0$$

$$\begin{split} \ell_{2005} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{11719489} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{11719489} = \mathbf{PI}(30, 58, 49, 58, 1, 0)_{249640} \\ \ell_{2006} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{16248257} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{16248257} = \mathbf{PI}(30, 58, 30, 58, 1, 0)_{248431} \\ \ell_{2007} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{7459457} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{7459457} = \mathbf{PI}(30, 58, 36, 58, 1, 0)_{248821} \\ \ell_{2008} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{8} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{10388993} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & \epsilon^{97} \end{bmatrix}_{10388993} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & \epsilon^{97} \end{bmatrix}_{10388993} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{3995137} = \mathbf{PI}(30, 58, 27, 58, 1, 0)_{248629} \\ \ell_{2010} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{9057793} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{39957793} = \mathbf{PI}(30, 58, 52, 58, 1, 0)_{249629} \\ \ell_{2011} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{1066817} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1066817} = \mathbf{PI}(30, 58, 62, 58, 1, 0)_{246805} \\ \ell_{2013} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{16512385} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{16512385} = \mathbf{PI}(30, 58, 4, 58, 1, 0)_{246805} \\ \ell_{2014} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{23995533} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{16512385} = \mathbf{PI}(30, 58, 4, 58, 1, 0)_{246805} \\ \ell_{2015} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{31} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{23995535} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{23995535} = \mathbf{PI}(30, 58, 4, 58, 1, 0)_{247242} \\ \ell_{2016} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{1890645} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{1890645} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{3062273} = \mathbf{PI}(30, 58, 46, 58, 1, 0)_{2494513} \\ \ell_{2015} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{1890645} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{15445697} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{3049985} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{3049985} = \mathbf{PI}(30, 58, 38, 58, 1, 0)_{2494513} \\ \ell_{2021} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{3065745}$$

$$\begin{split} \ell_{2026} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{41} \end{bmatrix}_{5327873} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{5327873} = \mathbf{Pl}(30, 58, 19, 58, 1, 0)_{247750} \\ \ell_{2027} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{9323201} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{9323201} = \mathbf{Pl}(30, 58, 35, 58, 1, 0)_{248758} \\ \ell_{2028} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{6128961} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{6128961} = \mathbf{Pl}(30, 58, 25, 58, 1, 0)_{248128} \\ \ell_{2029} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{14150049} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{14650049} = \mathbf{Pl}(30, 58, 54, 58, 1, 0)_{249955} \\ \ell_{2030} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{14114625} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{4528897} = \mathbf{Pl}(30, 58, 12, 58, 1, 0)_{247309} \\ \ell_{2031} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{1807905} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{4528897} = \mathbf{Pl}(30, 58, 9, 58, 1, 0)_{247120} \\ \ell_{2032} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{1807905} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{9588161} = \mathbf{Pl}(30, 58, 28, 58, 1, 0)_{248317} \\ \ell_{2034} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{363337} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{9588161} = \mathbf{Pl}(30, 58, 38, 58, 1, 0)_{248947} \\ \ell_{2035} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{386449} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{8789313} = \mathbf{Pl}(30, 58, 39, 58, 1, 0)_{248947} \\ \ell_{2037} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{8256193} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{8256193} = \mathbf{Pl}(30, 58, 39, 58, 1, 0)_{249010} \\ \ell_{2037} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14383105} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{13849217} = \mathbf{Pl}(30, 58, 59, 58, 1, 0)_{249020} \\ \ell_{2039} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14383105} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{14352737} = \mathbf{Pl}(30, 58, 24, 58, 1, 0)_{249036} \\ \ell_{2040} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14383105} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{13849217} = \mathbf{Pl}(30, 58, 24, 58, 1, 0)_{249036} \\ \ell_{2042} &= \begin{bmatrix} 1 & 0 &$$

$$\begin{split} \ell_{2047} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{02} \end{bmatrix}_{7725880} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{7725880} = \mathbf{Pl}(30, 58, 2, 58, 1, 0)_{246679} \\ \ell_{2048} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{4797121} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{4797121} = \mathbf{Pl}(30, 58, 56, 58, 1, 0)_{250681} \\ \ell_{2049} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{6660225} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{6660225} = \mathbf{Pl}(30, 58, 23, 58, 1, 0)_{248002} \\ \ell_{2050} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{1331969} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{1331969} = \mathbf{Pl}(30, 58, 45, 58, 1, 0)_{248388} \\ \ell_{2051} &= \begin{bmatrix} 1 & \epsilon^{52} & \epsilon^{52} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13527410} = \begin{bmatrix} 1 & 50 & 50 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13527410} = \mathbf{Pl}(0, 50, 0, 50, 1, 0)_{18689} \\ \ell_{2052} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{268289} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{15449409} = \mathbf{Pl}(31, 50, 51, 50, 1, 0)_{218015} \\ \ell_{2053} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{12786625} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{2786625} = \mathbf{Pl}(31, 50, 55, 50, 1, 0)_{218267} \\ \ell_{2054} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{12786625} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{3294305} = \mathbf{Pl}(31, 50, 55, 50, 1, 0)_{218267} \\ \ell_{2055} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{16780811} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{1678081} = \mathbf{Pl}(31, 50, 56, 50, 1, 0)_{21832} \\ \ell_{2057} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{1678081} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{1678081} = \mathbf{Pl}(31, 50, 56, 50, 1, 0)_{21833} \\ \ell_{2058} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{1984833} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{3198145} = \mathbf{Pl}(31, 50, 56, 50, 1, 0)_{218645} \\ \ell_{2060} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{12519105} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{120100} = \mathbf{Pl}(31, 50, 36, 50, 1, 0)_{216062} \\ \ell_{2061} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{12519105} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{1201105} = \mathbf{Pl}(31, 50, 44, 50, 1, 0)_{217977} \\ \ell_{2064} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{$$

$$\ell_{2068} = \begin{bmatrix} 1 & 0 & 0 & e^{59} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{1600065} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{1600065} = \mathbf{PI}(31, 50, 40, 50, 1, 0)_{217322}$$

$$\ell_{2069} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{11718209} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{11718209} = \mathbf{PI}(31, 50, 26, 50, 1, 0)_{216440}$$

$$\ell_{2070} = \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{16244903} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{16244903} = \mathbf{PI}(31, 50, 45, 50, 1, 0)_{217037}$$

$$\ell_{2071} = \begin{bmatrix} 1 & 0 & 0 & e^{41} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{7459713} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{10387205} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{10387205} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{3954945} = \mathbf{PI}(31, 50, 34, 50, 1, 0)_{216944}$$

$$\ell_{2073} = \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{9055617} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{3994945} = \mathbf{PI}(31, 50, 39, 50, 1, 0)_{216350}$$

$$\ell_{2074} = \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{10919425} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{10919425} = \mathbf{PI}(31, 50, 21, 50, 10, 0)_{216125}$$

$$\ell_{2075} = \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{1657073} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1067073} = \mathbf{PI}(31, 50, 60, 50, 1, 0)_{216352}$$

$$\ell_{2076} = \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1657073} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{16513281} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1067073} = \mathbf{PI}(31, 50, 57, 50, 1, 0)_{216393}$$

$$\ell_{2079} = \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{36513251} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{36513251} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{3465537} = \mathbf{PI}(31, 50, 57, 50, 1, 0)_{218393}$$

$$\ell_{2089} = \begin{bmatrix} 1 & 0 & 0 & e^{32} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{36979777} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{36979777} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{36979777} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{36999455} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{36999455} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{36999455} = \mathbf{PI}(31, 50, 4, 50, 1, 0)_{218893}$$

$$\ell_{2089} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{63} \end{bmatrix}_$$

$$\begin{split} &\ell_{2089} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{3729857} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{3729857} = \mathbf{PI}(31, 50, 62, 50, 1, 0)_{218708} \\ &\ell_{2090} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{9321345} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{9321345} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{9321345} = \mathbf{PI}(31, 50, 37, 50, 1, 0)_{217133} \\ &\ell_{2092} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{6127617} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{6127617} = \mathbf{PI}(31, 50, 23, 50, 1, 0)_{216251} \\ &\ell_{2093} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{14649913} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{14118017} = \mathbf{PI}(31, 50, 32, 50, 1, 0)_{216318} \\ &\ell_{2004} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{14118017} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{14118017} = \mathbf{PI}(31, 50, 18, 50, 1, 0)_{215936} \\ &\ell_{2095} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{4527809} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{1867969} = \mathbf{PI}(31, 50, 29, 50, 1, 0)_{216299} \\ &\ell_{2097} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{9500465} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{9500465} = \mathbf{PI}(31, 50, 29, 50, 1, 0)_{216377} \\ &\ell_{2099} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{536577} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{7871425} = \mathbf{PI}(31, 50, 29, 50, 1, 0)_{216377} \\ &\ell_{2100} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{8791425} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{7871425} = \mathbf{PI}(31, 50, 29, 50, 1, 0)_{216377} \\ &\ell_{2101} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{8256641} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{8791425} = \mathbf{PI}(31, 50, 46, 50, 1, 0)_{21638} \\ &\ell_{2102} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{11454209} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{1455209} = \mathbf{PI}(31, 50, 29, 50, 1, 0)_{21638} \\ &\ell_{2103} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{11454209} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{1455209} = \mathbf{PI}(31, 50, 33, 50, 1, 0)_{21658} \\ &\ell_{2104} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{11454209} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{1$$

$$\begin{split} \ell_{2110} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{13583425} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{13583425} = \mathbf{PI}(31, 50, 58, 50, 1, 0)_{218456} \\ \ell_{2111} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{7725697} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{7725697} = \mathbf{PI}(31, 50, 7, 50, 1, 0)_{215243} \\ \ell_{2112} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{4796225} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{4796225} = \mathbf{PI}(31, 50, 53, 50, 1, 0)_{218441} \\ \ell_{2113} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{6660673} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{6660673} = \mathbf{PI}(31, 50, 2, 50, 1, 0)_{214928} \\ \ell_{2114} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon \end{bmatrix}_{3331649} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1331649} = \mathbf{PI}(31, 50, 48, 50, 1, 0)_{217826} \\ \ell_{2115} &= \begin{bmatrix} 1 & \epsilon^{58} & \epsilon^{58} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{815555} = \begin{bmatrix} 1 & 3 & 3 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{815555} = \mathbf{PI}(0, 3, 0, 3, 1, 0)_{12673} \\ \ell_{2116} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{383533} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{13051969} = \mathbf{PI}(32, 3, 2, 3, 1, 0)_{28449} \\ \ell_{2118} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{288353} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 1 & 6 \end{bmatrix}_{12783617} = \mathbf{PI}(32, 3, 3, 3, 1, 0)_{28449} \\ \ell_{2119} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{12783617} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 & 6 \end{bmatrix}_{12783617} = \mathbf{PI}(32, 3, 5, 3, 1, 0)_{28575} \\ \ell_{2120} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{6391809} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 & 8 \end{bmatrix}_{6391809} = \mathbf{PI}(32, 3, 5, 3, 1, 0)_{28575} \\ \ell_{2122} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{33991809} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{1263497} = \mathbf{PI}(32, 3, 15, 3, 1, 0)_{29205} \\ \ell_{2122} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{3199785} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{31985405} = \mathbf{PI}(32, 3, 24, 3, 1, 0)_{29827} \\ \ell_{2123} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{13985409} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{11985409} = \mathbf{PI}(32, 3, 20, 3, 1, 0)_{29827} \\ \ell_{2125} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^$$

$$\begin{split} &\ell_{2131} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{5595201} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{5595201} = \mathbf{PI}(32,3,17,3,1,0)_{29331} \\ &\ell_{2132} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{1597953} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{1597953} = \mathbf{PI}(32,3,48,3,1,0)_{31281} \\ &\ell_{2133} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11721153} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{11721153} = \mathbf{PI}(32,3,51,3,1,0)_{31473} \\ &\ell_{2134} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{16247873} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{16247873} = \mathbf{PI}(32,3,54,3,1,0)_{31692} \\ &\ell_{2135} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{10387713} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{03887713} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{03887713} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{3994881} = \mathbf{PI}(32,3,60,3,1,0)_{32249} \\ &\ell_{2136} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{9056257} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{3994881} = \mathbf{PI}(32,3,58,3,1,0)_{31914} \\ &\ell_{2139} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{37} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{10922049} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{10922049} = \mathbf{PI}(32,3,57,3,1,0)_{31851} \\ &\ell_{2140} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{16514241} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & \epsilon^{36} \end{bmatrix}_{3464257} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{16514241} = \mathbf{PI}(32,3,46,3,1,0)_{31058} \\ &\ell_{2144} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{35079521} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 66 \end{bmatrix}_{3464257} = \mathbf{PI}(32,3,46,3,1,0)_{31058} \\ &\ell_{2144} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{35079521} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{15979521} = \mathbf{PI}(32,3,36,3,1,0)_{30398} \\ &\ell_{2144} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{33318337} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{15979521} = \mathbf{PI}(32,3,36,3,1,0)_{30598} \\ &\ell_{2144} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{33318337} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{33318337} = \mathbf{PI}(32,3,36,3,1,0)_{30598} \\ &\ell_{2144} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{33318337} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & 46 \end{bmatrix}$$

$$\begin{split} &\mathcal{L}_{2152} = \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{2631777} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{2931777} = \mathbf{PI}(32,3,14,3,1,0)_{29142} \\ &\mathcal{L}_{2153} = \begin{bmatrix} 1 & 0 & 0 & e^{40} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{3730625} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{3730625} = \mathbf{PI}(32,3,11,3,1,0)_{28953} \\ &\mathcal{L}_{2154} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{5326849} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{5326849} = \mathbf{PI}(32,3,8,3,1,0)_{28764} \\ &\mathcal{L}_{2155} = \begin{bmatrix} 1 & 0 & 0 & e^{7} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{9324609} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{9324609} = \mathbf{PI}(32,3,25,3,1,0)_{28958} \\ &\mathcal{L}_{2156} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{14649921} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{14649921} = \mathbf{PI}(32,3,31,3,1,0)_{30213} \\ &\mathcal{L}_{2158} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{14415329} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{14415329} = \mathbf{PI}(32,3,28,3,1,0)_{30024} \\ &\mathcal{L}_{2159} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{14115329} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{14528129} = \mathbf{PI}(32,3,21,3,1,0)_{29583} \\ &\mathcal{L}_{2160} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{1866305} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{1866305} = \mathbf{PI}(32,3,22,3,1,0)_{29646} \\ &\mathcal{L}_{2161} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{2663425} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{2663425} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{2663425} = \mathbf{PI}(32,3,49,3,1,0)_{31347} \\ &\mathcal{L}_{2162} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{3850017} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{8258113} = \mathbf{PI}(32,3,55,3,1,0)_{31410} \\ &\mathcal{L}_{2165} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{16} \end{bmatrix}_{8750017} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{1515399} = \mathbf{PI}(32,3,55,3,1,0)_{31410} \\ &\mathcal{L}_{2165} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{38563737} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{8258113} = \mathbf{PI}(32,3,55,3,1,0)_{31410} \\ &\mathcal{L}_{2165} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{16} \end{bmatrix}_{8750017} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{8258113} = \mathbf{PI}(32,3,55,3,1,0)_{31410} \\ &\mathcal{L}_{2165} = \begin{bmatrix} 1 & 0 & 0 & e^{$$

$$\ell_{2173} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{7989761} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{7089761} = \mathbf{PI}(32, 3, 47, 3, 1, 0)_{31221}$$

$$\ell_{2174} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{3382593} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{13582593} = \mathbf{PI}(32, 3, 44, 3, 1, 0)_{31032}$$

$$\ell_{2175} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{7723521} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{7723521} = \mathbf{PI}(32, 3, 37, 3, 1, 0)_{30591}$$

$$\ell_{2176} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{4794309} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{4794309} = \mathbf{PI}(32, 3, 38, 3, 1, 0)_{30545}$$

$$\ell_{2177} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{6660161} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{6660161} = \mathbf{PI}(32, 3, 35, 3, 1, 0)_{30276}$$

$$\ell_{2179} = \begin{bmatrix} 1 & \epsilon^{57} & \epsilon^{57} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13256945} = \begin{bmatrix} 1 & 49 & 49 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13256945} = \mathbf{PI}(0.49, 0.49, 1, 0)_{18561}$$

$$\ell_{2180} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{268417} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{268417} = \mathbf{PI}(33, 49, 48, 49, 1, 0)_{213859}$$

$$\ell_{2182} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{12784611} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{12784611} = \mathbf{PI}(33, 49, 34, 49, 1, 0)_{213952}$$

$$\ell_{2184} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{13779841} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{6392321} = \mathbf{PI}(33, 49, 59, 49, 1, 0)_{213985}$$

$$\ell_{2185} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{16779841} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{16779841} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{16779841} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{16779841} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{16779841} = \mathbf{PI}(33, 49, 59, 49, 1, 0)_{211150}$$

$$\ell_{2187} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{11987137} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{11987137} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{12971491} = \mathbf{PI}(33, 49, 59, 49, 1, 0)_{211470}$$

$$\ell_{2189} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{11937137} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{11987137} = \mathbf{PI}(33, 49, 59, 49,$$

$$\begin{split} \ell_{2215} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{12253313} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{12253313} = PI(33, 49, 54, 49, 1, 0)_{214237} \\ \ell_{2216} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{3232225} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{373109} = PI(33, 49, 7, 49, 1, 0)_{214174} \\ \ell_{2218} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{3731009} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{5327617} = PI(33, 49, 49, 1, 0)_{214174} \\ \ell_{2219} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{5327617} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{5327617} = PI(33, 49, 4, 49, 1, 0)_{211087} \\ \ell_{2220} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{6126657} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{6126657} = PI(33, 49, 13, 49, 1, 0)_{211654} \\ \ell_{22221} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{14167011} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{14647011} = PI(33, 49, 60, 49, 1, 0)_{214489} \\ \ell_{22222} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{14529089} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{4529089} = PI(33, 49, 58, 49, 1, 0)_{214489} \\ \ell_{2224} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{9590529} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{2663809} = PI(33, 49, 57, 49, 1, 0)_{21426} \\ \ell_{2225} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{66} \end{bmatrix}_{2663809} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{2663809} = PI(33, 49, 58, 49, 1, 0)_{214329} \\ \ell_{2225} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{66} \end{bmatrix}_{2663809} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{2663809} = PI(33, 49, 59, 49, 1, 0)_{213339} \\ \ell_{2226} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{66} \\ 0 & 1 & 1 & \epsilon^{67} \end{bmatrix}_{324849} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{3263809} = PI(33, 49, 59, 49, 1, 0)_{213426} \\ \ell_{2229} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{66} \\ 0 & 1 & 1 & \epsilon^{67} \end{bmatrix}_{324849} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{326389} = PI(33, 49, 49, 49, 1, 0)_{213426} \\ \ell_{2239} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{66} \\ 0 & 1 & 1 & \epsilon^{67} \end{bmatrix}_{324849} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{326389} = PI(33, 49, 49, 49, 1, 0)_{212473} \\ \ell_{2230} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{67} \\ 0 & 1 & 1 & \epsilon^{67} \end{bmatrix}_{1454273} = \begin{bmatrix} 1$$

$$\ell_{2236} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{14913985} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{14913985} = \mathbf{PI}(33, 49, 21, 49, 1, 0)_{212188}$$

$$\ell_{2237} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{7990401} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{7990401} = \mathbf{PI}(33, 49, 39, 49, 1, 0)_{213292}$$

$$\ell_{2238} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{13583681} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{13583681} = \mathbf{PI}(33, 49, 22, 49, 1, 0)_{212217}$$

$$\ell_{2249} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{4795205} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{4795205} = \mathbf{PI}(33, 49, 34, 49, 1, 0)_{212232}$$

$$\ell_{2241} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{660737} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{6660737} = \mathbf{PI}(33, 49, 19, 49, 1, 0)_{212914}$$

$$\ell_{2242} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{660737} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{6660737} = \mathbf{PI}(33, 49, 19, 49, 1, 0)_{212914}$$

$$\ell_{2242} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{1331905} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{1331905} = \mathbf{PI}(33, 49, 19, 49, 1, 0)_{212914}$$

$$\ell_{2244} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{10654785} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{10654785} = \mathbf{PI}(34, 22, 23, 22, 1, 0)_{105122}$$

$$\ell_{2245} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{12783681} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{12783681} = \mathbf{PI}(34, 22, 24, 22, 22, 21, 0)_{106445}$$

$$\ell_{2246} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{12783681} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{12783681} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{1677793} = \mathbf{PI}(34, 22, 58, 22, 1, 0)_{106445}$$

$$\ell_{2248} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{16777793} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{16777793} = \mathbf{PI}(34, 22, 47, 22, 1, 0)_{106634}$$

$$\ell_{2252} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{64} \end{bmatrix}_{16777793} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{11985729} = \mathbf{PI}(34, 22, 47, 22, 1, 0)_{106836}$$

$$\ell_{2252} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{63} \end{bmatrix}_{19957241} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{$$

$$\ell_{2257} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{6925761} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{6925761} = \mathbf{PI}(34, 22, 60, 22, 1, 0)_{107493}$$

$$\ell_{2258} = \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{4} \end{bmatrix}_{10120577} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{10120577} = \mathbf{PI}(34, 22, 6, 22, 1, 0)_{104051}$$

$$\ell_{2259} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{39} \end{bmatrix}_{5592769} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{5592769} = \mathbf{PI}(34, 22, 16, 22, 1, 0)_{104681}$$

$$\ell_{2260} = \begin{bmatrix} 1 & 0 & 0 & e^{59} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{1598721} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{1598721} = \mathbf{PI}(34, 22, 38, 22, 1, 0)_{106067}$$

$$\ell_{2261} = \begin{bmatrix} 1 & 0 & 0 & e^{29} \\ 0 & 1 & 1 & e^{9} \end{bmatrix}_{10247553} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{1717505} = \mathbf{PI}(34, 22, 48, 22, 1, 0)_{1040697}$$

$$\ell_{2262} = \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{9} \end{bmatrix}_{10247553} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{12247553} = \mathbf{PI}(34, 22, 48, 22, 1, 0)_{104303}$$

$$\ell_{2263} = \begin{bmatrix} 1 & 0 & 0 & e^{41} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{10349057} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{7457729} = \mathbf{PI}(34, 22, 28, 22, 1, 0)_{105437}$$

$$\ell_{2264} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{3396289} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{3996289} = \mathbf{PI}(34, 22, 31, 22, 1, 0)_{105626}$$

$$\ell_{2265} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{3396289} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{3996289} = \mathbf{PI}(34, 22, 37, 22, 1, 0)_{104210}$$

$$\ell_{2266} = \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{48} \end{bmatrix}_{10919109} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{1067969} = \mathbf{PI}(34, 22, 53, 22, 1, 0)_{105626}$$

$$\ell_{2267} = \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{16513409} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{106191999} = \mathbf{PI}(34, 22, 53, 22, 1, 0)_{105248}$$

$$\ell_{2270} = \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{16513499} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{10619999999} = \mathbf{PI}(34, 22, 25, 22, 2, 1, 0)_{105248}$$

$$\ell_{2271} = \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{16513499} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{2398081} = \mathbf{PI}(34, 22, 25, 22, 1, 0)_{105248}$$

$$\ell_{2272}$$

$$\begin{split} \ell_{2299} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^2 \end{bmatrix}_{15179585} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{15179585} = \mathbf{PI}(34, 22, 24, 22, 1, 0)_{105185} \\ \ell_{2300} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{14915457} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{14915457} = \mathbf{PI}(34, 22, 14, 22, 1, 0)_{104555} \\ \ell_{2301} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{7992577} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{7992577} = \mathbf{PI}(34, 22, 52, 22, 1, 0)_{106949} \\ \ell_{2302} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{7725953} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{13582913} = \mathbf{PI}(34, 22, 34, 22, 1, 0)_{105815} \\ \ell_{2303} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{7725953} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{7725953} = \mathbf{PI}(34, 22, 33, 22, 1, 0)_{105815} \\ \ell_{2304} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{476161} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{4766161} = \mathbf{PI}(34, 22, 55, 22, 1, 0)_{107138} \\ \ell_{2305} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1332097} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{1332097} = \mathbf{PI}(34, 22, 55, 22, 1, 0)_{107138} \\ \ell_{2306} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1382097} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{1332097} = \mathbf{PI}(34, 22, 72, 22, 1, 0)_{105374} \\ \ell_{2307} &= \begin{bmatrix} 1 & \epsilon^{56} & \epsilon^{56} & 0 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10822760} = \begin{bmatrix} 1 & 40 & 40 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10822760} = \mathbf{PI}(0, 40, 0, 40, 1, 0)_{17699} \\ \ell_{2309} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{288545} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{288545} = \mathbf{PI}(35, 40, 40, 40, 1, 0)_{177636} \\ \ell_{2312} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{12784705} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{333345} = \mathbf{PI}(35, 40, 49, 40, 1, 0)_{178206} \\ \ell_{2312} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{16780545} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{12984513} = \mathbf{PI}(35, 40, 50, 40, 1, 0)_{178206} \\ \ell_{2314} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{16895453} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{19984513} = \mathbf{PI}(35, 40, 5, 40, 1, 0)_{178264} \\ \ell_{2315} &= \begin{bmatrix} 1 & 0 & 0 &$$

$$\begin{split} \ell_{2320} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{2134465} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{2134465} = \mathbf{PI}(35, 40, 5, 40, 1, 0)_{175431} \\ \ell_{2321} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{6924353} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{6924353} = \mathbf{PI}(35, 40, 45, 40, 1, 0)_{17591} \\ \ell_{2322} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{10123009} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{10123009} = \mathbf{PI}(35, 40, 52, 40, 1, 0)_{176880} \\ \ell_{2323} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{5593601} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{5593601} = \mathbf{PI}(35, 40, 28, 40, 1, 0)_{176880} \\ \ell_{2324} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{69} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{11720321} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{11720321} = \mathbf{PI}(35, 40, 36, 40, 1, 0)_{177384} \\ \ell_{2325} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{11720321} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{16245697} = \mathbf{PI}(35, 40, 36, 40, 1, 0)_{176439} \\ \ell_{2327} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{7457473} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{10387201} = \mathbf{PI}(35, 40, 21, 40, 1, 0)_{176439} \\ \ell_{2329} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{30387201} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{3085841} = \mathbf{PI}(35, 40, 39, 40, 1, 0)_{17692} \\ \ell_{2330} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{9055937} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{10920641} = \mathbf{PI}(35, 40, 34, 40, 1, 0)_{176302} \\ \ell_{2331} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{10582257} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{9055937} = \mathbf{PI}(35, 40, 34, 40, 1, 0)_{176303} \\ \ell_{2332} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{10582257} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1068225} = \mathbf{PI}(35, 40, 34, 40, 1, 0)_{176313} \\ \ell_{2333} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{2398529} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{2398529} = \mathbf{PI}(35, 40, 9, 40, 1, 0)_{176313} \\ \ell_{2333} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{16512257} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{2398529} = \mathbf{PI}(35, 40, 9, 40, 1, 0)_{176313} \\ \ell_{2333} &= \begin{bmatrix} 1 & 0 &$$

$$\ell_{2341} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e \end{bmatrix}_{13049025} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{13049025} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10652225} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10652225} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{12052225} = \mathbf{PI}(35, 40, 1, 40, 1, 0)_{176179} = \mathbf{PI}_{2343} = \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{12250561} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{12250561} = \mathbf{PI}_{135, 40, 27, 40, 1, 0)_{176817} = \mathbf{PI}_{2344} = \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{2933121} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{2933122} = \mathbf{PI}_{135, 40, 51, 40, 1, 0)_{177822} = \mathbf{PI}_{2345} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{3731777} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{3731777} = \mathbf{PI}_{135, 40, 42, 40, 1, 0)_{177242} = \mathbf{PI}_{2346} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{3229153} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{5329153} = \mathbf{PI}_{135, 40, 2, 40, 1, 0)_{177242} = \mathbf{PI}_{2347} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{9324353} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{9324353} = \mathbf{PI}_{135, 40, 2, 40, 1, 0)_{177542} = \mathbf{PI}_{2348} = \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{14647361} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{14647361} = \mathbf{PI}_{135, 40, 54, 40, 1, 0)_{178578} = \mathbf{PI}_{2350} = \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14647361} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{14647361} = \mathbf{PI}_{1416993} = \mathbf{PI}_{1457361} = \mathbf{$$

$$\ell_{2302} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{11187201} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{11187201} = \mathbf{PI}(35, 40, 14, 40, 1, 0)_{175998}$$

$$\ell_{2363} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{15183233} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{15183233} = \mathbf{PI}(35, 40, 18, 40, 1, 0)_{176750}$$

$$\ell_{2364} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{14914945} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{7991681} = \mathbf{PI}(35, 40, 58, 40, 1, 0)_{178770}$$

$$\ell_{2365} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{7991681} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{7991681} = \mathbf{PI}(35, 40, 35, 40, 1, 0)_{177321}$$

$$\ell_{2367} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{13583873} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{7725633} = \mathbf{PI}(35, 40, 11, 40, 1, 0)_{176187}$$

$$\ell_{2368} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{7725633} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{7725633} = \mathbf{PI}(35, 40, 17, 40, 1, 0)_{176187}$$

$$\ell_{2369} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{6657793} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{6657793} = \mathbf{PI}(35, 40, 32, 40, 1, 0)_{177132}$$

$$\ell_{2370} = \begin{bmatrix} 1 & \epsilon^{27} & \epsilon^{27} & 0 \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{1332289} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1332289} = \mathbf{PI}(35, 40, 8, 40, 1, 0)_{175620}$$

$$\ell_{2372} = \begin{bmatrix} 1 & \epsilon^{27} & \epsilon^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12445550} = \begin{bmatrix} 1 & 46 & 46 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12445550} = \mathbf{PI}(36, 46, 47, 46, 1, 0)_{201892}$$

$$\ell_{2373} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{268609} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{268609} = \mathbf{PI}(36, 46, 47, 46, 1, 0)_{2012892}$$

$$\ell_{2374} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{8523521} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{8523521} = \mathbf{PI}(36, 46, 53, 46, 1, 0)_{202277}$$

$$\ell_{2375} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{8523521} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 2^{41} \end{bmatrix}_{11984449} = \mathbf{PI}(36, 46, 53, 46, 1, 0)_{202270}$$

$$\ell_{2376} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{4261761} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{4261761} = \mathbf{PI}(36, 46, 53, 46, 1, 0)_{202270}$$

$$\ell_$$

$$\begin{split} \ell_{2383} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{9853953} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{9853953} = \mathbf{Pl}(36, 46, 37, 46, 1, 0)_{201202} \\ \ell_{2384} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{2130881} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{2130881} = \mathbf{Pl}(36, 46, 45, 46, 1, 0)_{201766} \\ \ell_{2385} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{6935953} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{6925953} = \mathbf{Pl}(36, 46, 3, 46, 1, 0)_{199120} \\ \ell_{2386} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{10119937} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{10119937} = \mathbf{Pl}(36, 46, 16, 46, 1, 0)_{199939} \\ \ell_{2387} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{159489} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{1594489} = \mathbf{Pl}(36, 46, 13, 46, 1, 0)_{199730} \\ \ell_{2389} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{11719937} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{16244673} = \mathbf{Pl}(36, 46, 35, 46, 1, 0)_{201136} \\ \ell_{2391} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{7460225} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{7460225} = \mathbf{Pl}(36, 46, 30, 46, 1, 0)_{200317} \\ \ell_{2392} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{7460225} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{10388033} = \mathbf{Pl}(36, 46, 56, 46, 1, 0)_{200342} \\ \ell_{2394} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{3998209} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{3998209} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{3908209} = \mathbf{Pl}(36, 46, 56, 46, 1, 0)_{2002459} \\ \ell_{2395} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{3998729} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{3998209} = \mathbf{Pl}(36, 46, 54, 46, 1, 0)_{2002449} \\ \ell_{2396} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{3998729} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{3998729} = \mathbf{Pl}(36, 46, 54, 64, 1, 0)_{2002449} \\ \ell_{2399} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{36511899} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{3398977} = \mathbf{Pl}(36, 46, 54, 64, 1, 0)_{2002449} \\ \ell_{2400} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{3589677} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{3318977}$$

$$\begin{split} \ell_{2404} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{31} \end{bmatrix}_{789745} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{789745} = \mathbf{Pl}(36, 46, 26, 46, 1, 0)_{202059} \\ \ell_{2405} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13052353} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 5^4 \end{bmatrix}_{13052353} = \mathbf{Pl}(36, 46, 52, 46, 1, 0)_{202207} \\ \ell_{2406} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{5859969} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{5859969} = \mathbf{Pl}(36, 46, 39, 46, 1, 0)_{201388} \\ \ell_{2407} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{10653889} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{10553889} = \mathbf{Pl}(36, 46, 9, 46, 1, 0)_{199498} \\ \ell_{2408} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{12250049} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{12250049} = \mathbf{Pl}(36, 46, 0, 46, 1, 0)_{199498} \\ \ell_{2409} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{3730113} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{3730113} = \mathbf{Pl}(36, 46, 60, 46, 1, 0)_{202711} \\ \ell_{2410} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{3321729} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 6^{13} \end{bmatrix}_{3321729} = \mathbf{Pl}(36, 46, 44, 46, 1, 0)_{201703} \\ \ell_{2411} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{6128065} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{6128065} = \mathbf{Pl}(36, 46, 34, 46, 1, 0)_{199057} \\ \ell_{2414} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{14114333} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{14649537} = \mathbf{Pl}(36, 46, 34, 46, 1, 0)_{202900} \\ \ell_{2414} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{14114333} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 4^{13} \end{bmatrix}_{4529857} = \mathbf{Pl}(36, 46, 55, 46, 1, 0)_{202900} \\ \ell_{2415} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{4529857} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 4^{13} \end{bmatrix}_{4529857} = \mathbf{Pl}(36, 46, 23, 46, 1, 0)_{202900} \\ \ell_{2415} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{4529857} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 4^{13} \end{bmatrix}_{4529857} = \mathbf{Pl}(36, 46, 23, 46, 1, 0)_{202396} \\ \ell_{2416} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{266995} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 4^{13} \end{bmatrix}_{535233} = \mathbf{Pl}(36, 46, 23, 46, 1, 0)_{202322} \\ \ell_{2419} &=$$

$$\ell_{2425} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{0} \end{bmatrix}_{13849921} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{13849921} = \mathbf{PI}(36, 46, 49, 46, 1, 0)_{202018}$$

$$\ell_{2426} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{11187969} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{11187969} = \mathbf{PI}(36, 46, 31, 46, 1, 0)_{201010}$$

$$\ell_{2427} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{15182465} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{15182465} = \mathbf{PI}(36, 46, 33, 46, 1, 0)_{201010}$$

$$\ell_{2428} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{14914369} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{14914369} = \mathbf{PI}(36, 46, 15, 46, 1, 0)_{199876}$$

$$\ell_{2429} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{13583489} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{13583489} = \mathbf{PI}(36, 46, 50, 46, 1, 0)_{202081}$$

$$\ell_{2431} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{7724737} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{77224737} = \mathbf{PI}(36, 46, 58, 46, 1, 0)_{202085}$$

$$\ell_{2432} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{7724737} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{77224737} = \mathbf{PI}(36, 46, 58, 46, 1, 0)_{202085}$$

$$\ell_{2433} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{6660481} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{6660481} = \mathbf{PI}(36, 46, 7, 46, 1, 0)_{199372}$$

$$\ell_{2434} = \begin{bmatrix} 1 & \epsilon^{18} & \epsilon^{18} & 0 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{13222993} = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2979275} = \mathbf{PI}(36, 46, 41, 46, 1, 0)_{201514}$$

$$\ell_{2435} = \begin{bmatrix} 1 & \epsilon^{18} & \epsilon^{18} & 0 \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{12222993} = \begin{bmatrix} 1 & 1 & 1 & 1 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2979275} = \mathbf{PI}(37, 11, 11, 11, 1, 0)_{6647}$$

$$\ell_{2438} = \begin{bmatrix} 1 & \epsilon^{10} & \epsilon^{10} & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{12222993} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{12252993} = \mathbf{PI}(37, 11, 10, 11, 1, 0)_{61403}$$

$$\ell_{2449} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{3525699} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{12784769} = \mathbf{PI}(37, 11, 22, 11, 1, 0)_{61403}$$

$$\ell_{2449} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{3525699} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{1692333} = \mathbf{PI}(37, 11, 24, 11, 1, 0)_{$$

$$\begin{split} \ell_{2446} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{9} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{12516929} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{12516929} = \mathbf{PI}(37, 11, 47, 11, 1, 0)_{62978} \\ \ell_{2447} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{457} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{2151393} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2131393} = \mathbf{PI}(37, 11, 36, 11, 1, 0)_{61340} \\ \ell_{2449} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{2131393} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{2131393} = \mathbf{PI}(37, 11, 30, 11, 1, 0)_{61907} \\ \ell_{2450} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{10121601} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{10121601} = \mathbf{PI}(37, 11, 30, 11, 1, 0)_{60906} \\ \ell_{2451} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{10121601} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{10121601} = \mathbf{PI}(37, 11, 8, 11, 1, 0)_{60521} \\ \ell_{2452} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{1599617} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{1599617} = \mathbf{PI}(37, 11, 8, 11, 1, 0)_{60522} \\ \ell_{2453} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11717633} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{11717633} = \mathbf{PI}(37, 11, 1, 1, 1, 1, 1, 0)_{61529} \\ \ell_{2454} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{16248577} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{16248577} = \mathbf{PI}(37, 11, 1, 1, 1, 1, 1, 0)_{60332} \\ \ell_{2455} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{16248577} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{16248577} = \mathbf{PI}(37, 11, 1, 1, 1, 1, 1, 0)_{60393} \\ \ell_{2456} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{16386177} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{10386177} = \mathbf{PI}(37, 11, 1, 1, 1, 1, 1, 0)_{63993} \\ \ell_{2457} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{10386177} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{3098017} = \mathbf{PI}(37, 11, 1, 1, 1, 1, 1, 0)_{63993} \\ \ell_{2459} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{10919873} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{9955809} = \mathbf{PI}(37, 11, 3, 11, 1, 0)_{63993} \\ \ell_{2469} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{10919873} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{10919873} = \mathbf{PI}(37, 11, 3, 11, 1, 0)_{63993} \\ \ell_{2462} &= \begin{bmatrix}$$

$$\begin{split} \ell_{2467} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{13315777} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{13315777} = \mathbf{PI}(37,11,27,11,1,0)_{61718} \\ \ell_{2468} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{799809} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{799809} = \mathbf{PI}(37,11,38,11,1,0)_{62411} \\ \ell_{2469} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{13049345} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{13049345} = \mathbf{PI}(37,11,48,11,1,0)_{62852} \\ \ell_{2470} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{585817} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{5858817} = \mathbf{PI}(37,11,48,11,1,0)_{63041} \\ \ell_{2471} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{10655425} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{10655425} = \mathbf{PI}(37,11,59,11,1,0)_{63734} \\ \ell_{2472} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{3729473} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{29299409} = \mathbf{PI}(37,11,11,11,11,1,0)_{60080} \\ \ell_{2473} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{3729473} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{37293499} = \mathbf{PI}(37,11,23,11,1,0)_{61781} \\ \ell_{2474} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{3323841} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{9323841} = \mathbf{PI}(37,11,31,11,1,0)_{61970} \\ \ell_{2476} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{1468849} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{1468849} = \mathbf{PI}(37,11,20,11,1,0)_{61970} \\ \ell_{2477} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{14618849} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{1461849} = \mathbf{PI}(37,11,21,11,1,0)_{60584} \\ \ell_{2479} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{1867777} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{1867777} = \mathbf{PI}(37,11,51,11,1,0)_{63348} \\ \ell_{2489} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{3857649} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{3957649} = \mathbf{PI}(37,11,56,11,1,0)_{63348} \\ \ell_{2481} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3857985} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{39587649} = \mathbf{PI}(37,11,56,11,1,0)_{63923} \\ \ell_{2485} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3859633} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{$$

$$\begin{array}{l} \ell_{2488} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{18} \\ 0 & 1 & 1 & 6 \end{bmatrix}_{11454977} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{11454977} = \mathbf{PI}(37,11,18,11,1,0)_{61151} \\ \ell_{2489} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \\ 1_{1186305} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 2^4 \\ 1_{1186305} = \mathbf{PI}(37,11,15,11,1,0)_{60602} \\ \ell_{2491} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 1_{5179841} = \begin{bmatrix} 1 & 0 & 0 & 6^{22} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 4^{3} \\ 0 & 1 & 1 & \epsilon^{3} \\ 0 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 0 & 1 & 1 & 1 \\$$

$$\begin{split} &\ell_{2500} = \begin{bmatrix} 1 & 0 & 0 & e^{29} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{7193400} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{7193409} = PI(38, 14, 31, 14, 1, 0)_{73878} \\ &\ell_{2510} = \begin{bmatrix} 1 & 0 & 0 & e^{9} \\ 0 & 1 & 1 & e^{32} \end{bmatrix}_{12517053} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{12517053} = PI(38, 14, 13, 14, 1, 0)_{72744} \\ &\ell_{2511} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{9855297} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 2^{3} \end{bmatrix}_{9855297} = PI(38, 14, 31, 14, 1, 0)_{72114} \\ &\ell_{2512} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{2131905} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 2^{3} \end{bmatrix}_{2131905} = PI(38, 14, 41, 14, 1, 0)_{74508} \\ &\ell_{2513} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{10122305} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 2^{0} \end{bmatrix}_{9925185} = PI(38, 14, 39, 14, 1, 0)_{74382} \\ &\ell_{2514} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{10122305} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 4^{3} \end{bmatrix}_{10122305} = PI(38, 14, 59, 14, 1, 0)_{74382} \\ &\ell_{2515} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{1599233} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 2^{2} \end{bmatrix}_{1599233} = PI(38, 14, 34, 14, 1, 0)_{74067} \\ &\ell_{2516} = \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{1718465} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{11718465} = PI(38, 14, 44, 14, 1, 0)_{74097} \\ &\ell_{2519} = \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{1718465} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{16246145} = PI(38, 14, 48, 14, 1, 0)_{74949} \\ &\ell_{2520} = \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{10386689} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{16246145} = PI(38, 14, 48, 14, 1, 0)_{73633} \\ &\ell_{2521} = \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{30386689} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{30386689} = PI(38, 14, 20, 14, 1, 0)_{73633} \\ &\ell_{2522} = \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{3097057} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{10919233} = PI(38, 14, 20, 14, 1, 0)_{73634} \\ &\ell_{2523} = \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{3058689} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{10919233} = PI(38, 14, 6, 14, 1, 0)_{73639} \\ &\ell_{2524} = \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{$$

$$\ell_{2530} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{15448257} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{15448257} = PI(38, 14, 23, 14, 1, 0)_{73374}$$

$$\ell_{2531} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{13319160} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{13319160} = PI(38, 14, 25, 14, 1, 0)_{73500}$$

$$\ell_{2532} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{799617} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{799617} = PI(38, 14, 37, 14, 1, 0)_{74256}$$

$$\ell_{2533} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{13052289} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{13052280} = PI(38, 14, 37, 14, 1, 0)_{74256}$$

$$\ell_{2534} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{586273} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{13052289} = PI(38, 14, 57, 14, 1, 0)_{75516}$$

$$\ell_{2535} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{10654849} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{10654849} = PI(38, 14, 57, 14, 1, 0)_{73520}$$

$$\ell_{2536} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{267} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{12253825} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{2031137} = PI(38, 14, 19, 14, 1, 0)_{73122}$$

$$\ell_{2538} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{467} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{2031137} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{2031137} = PI(38, 14, 19, 14, 1, 0)_{73122}$$

$$\ell_{2538} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{3728321} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3728321} = PI(38, 14, 19, 14, 1, 0)_{73122}$$

$$\ell_{2540} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{9324097} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{3728321} = PI(38, 14, 52, 14, 1, 0)_{75579}$$

$$\ell_{2541} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{1415000} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{1415000} = PI(38, 14, 58, 14, 1, 0)_{75579}$$

$$\ell_{2542} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{1415000} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{1415000} = PI(38, 14, 14, 14, 1, 0)_{72681}$$

$$\ell_{2545} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{1415000} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{1415000} = PI(38, 14, 14, 14, 1, 0)_{72681}$$

$$\ell_{2545} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{968$$

$$\begin{array}{l} \ell_{2551} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{14380737} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{14380737} = \mathbf{PI}(38,14,63,14,1,0)_{75894} \\ \ell_{2552} = \begin{bmatrix} 1 & 0 & 0 & e^{40} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{1453185} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{11453185} = \mathbf{PI}(38,14,49,14,1,0)_{75012} \\ \ell_{2553} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{1350369} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{13850369} = \mathbf{PI}(38,14,45,14,1,0)_{74130} \\ \ell_{2554} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{11185217} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{1318507} = \mathbf{PI}(38,14,22,14,1,0)_{73511} \\ \ell_{2555} = \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{4} \end{bmatrix}_{15181505} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{13181507} = \mathbf{PI}(38,14,24,14,1,0)_{73311} \\ \ell_{2556} = \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{4} \end{bmatrix}_{7902129} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{14913281} = \mathbf{PI}(38,14,24,14,1,0)_{73437} \\ \ell_{2558} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{4} \end{bmatrix}_{7902129} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{13583041} = \mathbf{PI}(38,14,4,14,1,0)_{72177} \\ \ell_{2559} = \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{7725121} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{7725121} = \mathbf{PI}(38,14,46,14,1,0)_{74823} \\ \ell_{2560} = \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{7725121} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{7725121} = \mathbf{PI}(38,14,50,14,1,0)_{75075} \\ \ell_{2562} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{3333377} = \mathbf{PI}(38,14,50,14,1,0)_{75075} \\ \ell_{2562} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{3333377} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{3333377} = \mathbf{PI}(38,14,50,14,1,0)_{75075} \\ \ell_{2564} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{3733377} = \mathbf{PI}(38,14,50,14,1,0)_{75075} \\ \ell_{2564} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{3733377} = \mathbf{PI}(38,20,20,20,20,1,0)_{109900} \\ \ell_{2566} = \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{3823856} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{37294217} = \mathbf{PI}(39,20,20,20,1,0)_{10900} \\ \ell_{2566} = \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{3823855} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 29 \end{bmatrix}$$

$$\begin{split} \ell_{2572} &= \begin{bmatrix} 1 & 0 & 0 & 0 & \epsilon^{00} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{3197697} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{3197697} = \mathbf{PI}(39, 20, 3, 20, 1, 0)_{95929} \\ \ell_{2573} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{7192833} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{7192833} = \mathbf{PI}(39, 20, 23, 20, 1, 0)_{97189} \\ \ell_{2574} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{12519681} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{12519681} = \mathbf{PI}(39, 20, 43, 20, 1, 0)_{98149} \\ \ell_{2575} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{2132417} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{9853569} = \mathbf{PI}(39, 20, 63, 20, 1, 0)_{99709} \\ \ell_{2576} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{2132417} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{2132417} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{2132417} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{3232417} = \mathbf{PI}(39, 20, 50, 20, 1, 0)_{98890} \\ \ell_{2577} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{10120355} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{3232417} = \mathbf{PI}(39, 20, 50, 20, 1, 0)_{98134} \\ \ell_{2578} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{10120355} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{10120355} = \mathbf{PI}(39, 20, 26, 20, 1, 0)_{98134} \\ \ell_{2580} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1508849} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{1598849} = \mathbf{PI}(39, 20, 14, 20, 1, 0)_{96622} \\ \ell_{2582} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{11721281} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{1598849} = \mathbf{PI}(39, 20, 18, 20, 1, 0)_{96874} \\ \ell_{2582} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{16246949} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{16246849} = \mathbf{PI}(39, 20, 58, 20, 1, 0)_{99394} \\ \ell_{2584} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{10388545} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{10388545} = \mathbf{PI}(39, 20, 58, 20, 1, 0)_{99394} \\ \ell_{2585} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{10383545} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{10392053} = \mathbf{PI}(39, 20, 35, 20, 1, 0)_{99205} \\ \ell_{2587} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{106249} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0$$

$$\begin{split} \ell_{2503} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{15978433} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{15978433} = \mathbf{PI}(39, 20, 32, 20, 1, 0)_{97766} \\ \ell_{2594} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{15446849} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{15446849} = \mathbf{PI}(39, 20, 28, 20, 1, 0)_{97504} \\ \ell_{2595} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{13315969} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{13315969} = \mathbf{PI}(39, 20, 28, 20, 1, 0)_{96244} \\ \ell_{2596} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{13049153} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{13049153} = \mathbf{PI}(39, 20, 24, 20, 1, 0)_{97252} \\ \ell_{2598} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{13049153} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{13049153} = \mathbf{PI}(39, 20, 36, 20, 1, 0)_{98008} \\ \ell_{2599} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{13049153} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{13049153} = \mathbf{PI}(39, 20, 36, 20, 1, 0)_{98008} \\ \ell_{2599} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{13049153} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{10652289} = \mathbf{PI}(39, 20, 36, 20, 1, 0)_{98008} \\ \ell_{2600} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{13062289} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{12251137} = \mathbf{PI}(39, 20, 61, 20, 1, 0)_{98533} \\ \ell_{2601} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{2930817} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{2930817} = \mathbf{PI}(39, 20, 41, 20, 1, 0)_{98533} \\ \ell_{2602} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{3321985} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{3321985} = \mathbf{PI}(39, 20, 1, 20, 1, 0)_{96685} \\ \ell_{2604} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{14648001} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{3921985} = \mathbf{PI}(39, 20, 15, 20, 1, 0)_{96685} \\ \ell_{2604} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{14117889} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{14648001} = \mathbf{PI}(39, 20, 39, 20, 1, 0)_{96865} \\ \ell_{2606} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1411789} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{14648001} = \mathbf{PI}(39, 20, 22, 20, 1, 0)_{9836} \\ \ell_{2608} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon$$

$$\begin{split} &\ell_{2614} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{15715265} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{15715265} = \mathbf{PI}(39, 20, 54, 20, 1, 0)_{99142} \\ &\ell_{2615} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{14383681} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{14383681} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{1451713} = \mathbf{PI}(39, 20, 47, 20, 1, 0)_{98701} \\ &\ell_{2617} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{13849601} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{13849601} = \mathbf{PI}(39, 20, 47, 20, 1, 0)_{96337} \\ &\ell_{2618} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{131849601} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{11187649} = \mathbf{PI}(39, 20, 7, 20, 1, 0)_{96307} \\ &\ell_{2619} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{15181057} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{15181057} = \mathbf{PI}(39, 20, 9, 20, 1, 0)_{96307} \\ &\ell_{2620} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{14916865} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{7992257} = \mathbf{PI}(39, 20, 29, 20, 1, 0)_{97567} \\ &\ell_{2621} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{7992257} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{7992257} = \mathbf{PI}(39, 20, 33, 20, 1, 0)_{9979} \\ &\ell_{2622} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{13584257} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{13584257} = \mathbf{PI}(39, 20, 53, 20, 1, 0)_{99079} \\ &\ell_{2623} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{4794561} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{4794561} = \mathbf{PI}(39, 20, 53, 20, 1, 0)_{99078} \\ &\ell_{2624} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{4794561} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{4794561} = \mathbf{PI}(39, 20, 56, 20, 1, 0)_{9968} \\ &\ell_{2625} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{4794561} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{4794561} = \mathbf{PI}(39, 20, 44, 20, 1, 0)_{99648} \\ &\ell_{2626} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{4794561} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{1333057} = \mathbf{PI}(39, 20, 44, 20, 1, 0)_{99678} \\ &\ell_{2627} = \begin{bmatrix} 1 & \epsilon^{7} & \epsilon^{7} & 0 \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{12783873} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0$$

$$\begin{split} \ell_{2635} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{11987073} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{11987073} = PI(40, 35, 43, 35, 1, 0)_{157985} \\ \ell_{2636} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{90} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3195999} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{3195999} = PI(40, 35, 28, 35, 1, 0)_{157040} \\ \ell_{2637} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{7191425} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{7191425} = PI(40, 35, 28, 35, 1, 0)_{157040} \\ \ell_{2638} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{9} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{12516545} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{12516545} = PI(40, 35, 24, 35, 1, 0)_{156788} \\ \ell_{2639} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{9856513} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{2130817} = PI(40, 35, 59, 35, 1, 0)_{156284} \\ \ell_{2640} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{2130817} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{2130817} = PI(40, 35, 16, 35, 1, 0)_{156284} \\ \ell_{2642} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{10122241} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{10122241} = PI(40, 35, 59, 35, 1, 0)_{158489} \\ \ell_{2643} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{10122241} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{10122241} = PI(40, 35, 55, 35, 1, 0)_{158536} \\ \ell_{2644} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{11719233} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{10212241} = PI(40, 35, 20, 35, 1, 0)_{156536} \\ \ell_{2645} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{11719233} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{1601025} = PI(40, 35, 56, 35, 1, 0)_{156854} \\ \ell_{2646} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{7457089} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{16248193} = PI(40, 35, 56, 35, 1, 0)_{156977} \\ \ell_{2648} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{3996333} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{10385985} = PI(40, 35, 52, 35, 1, 0)_{156975} \\ \ell_{2654} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{3996333} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{10921921} = PI(40, 35, 52, 35, 1, 0)_{156725} \\ \ell_{2651} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{1065$$

$$\begin{split} \ell_{2056} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{5061121} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{3061121} = \mathbf{Pl}(40, 35, 15, 35, 1, 0)_{156221} \\ \ell_{2657} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{15979329} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{15979329} = \mathbf{Pl}(40, 35, 44, 35, 1, 0)_{15796} \\ \ell_{2658} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{7} \end{bmatrix}_{15447873} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & \epsilon^{7} \end{bmatrix}_{15447873} = \mathbf{Pl}(40, 35, 40, 35, 1, 0)_{15796} \\ \ell_{2659} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{13317569} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{13317569} = \mathbf{Pl}(40, 35, 62, 35, 1, 0)_{15998} \\ \ell_{2660} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{300513} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{3052737} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{13052737} = \mathbf{Pl}(40, 35, 29, 35, 1, 0)_{157103} \\ \ell_{2662} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{1654081} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{1054081} = \mathbf{Pl}(40, 35, 58, 35, 1, 0)_{158030} \\ \ell_{2663} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{12252801} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{12252801} = \mathbf{Pl}(40, 35, 50, 35, 1, 0)_{158342} \\ \ell_{2665} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{12252801} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{12252801} = \mathbf{Pl}(40, 35, 50, 35, 1, 0)_{158426} \\ \ell_{2666} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{3731585} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{3731585} = \mathbf{Pl}(40, 35, 50, 35, 1, 0)_{158426} \\ \ell_{2667} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{320705} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{3231329} = \mathbf{Pl}(40, 35, 50, 35, 1, 0)_{158678} \\ \ell_{2669} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{34647617} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{320705} = \mathbf{Pl}(40, 35, 38, 35, 1, 0)_{158699} \\ \ell_{2669} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{14118145} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{320705} = \mathbf{Pl}(40, 35, 38, 35, 1, 0)_{158699} \\ \ell_{2679} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{14647617} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{34647617} = \mathbf{Pl}(40$$

$$\begin{split} \ell_{2677} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{8256449} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{8256449} = \mathbf{Pl}(40, 35, 6, 35, 1, 0)_{155654} \\ \ell_{2678} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{15712641} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{15712641} = \mathbf{Pl}(40, 35, 37, 35, 1, 0)_{157607} \\ \ell_{2679} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{14382849} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{14382849} = \mathbf{Pl}(40, 35, 14, 35, 1, 0)_{156158} \\ \ell_{2680} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{11451521} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{11451521} = \mathbf{Pl}(40, 35, 45, 35, 1, 0)_{158111} \\ \ell_{2681} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{13849281} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{1187777} = \mathbf{Pl}(40, 35, 41, 35, 1, 0)_{155906} \\ \ell_{2682} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{11187777} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{1187777} = \mathbf{Pl}(40, 35, 10, 35, 1, 0)_{155906} \\ \ell_{2683} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{15183011} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{14914177} = \mathbf{Pl}(40, 35, 61, 35, 1, 0)_{15919} \\ \ell_{2684} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{7992705} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{7992705} = \mathbf{Pl}(40, 35, 57, 35, 1, 0)_{158667} \\ \ell_{2686} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{7721929} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{13582337} = \mathbf{Pl}(40, 35, 49, 35, 1, 0)_{15866} \\ \ell_{2688} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{7721929} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{33582337} = \mathbf{Pl}(40, 35, 49, 35, 1, 0)_{15866} \\ \ell_{2688} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{659777} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{4797377} = \mathbf{Pl}(40, 35, 49, 35, 1, 0)_{15866} \\ \ell_{2699} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{62692855} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{33822317} = \mathbf{Pl}(41, 23, 22, 23, 1, 0)_{1090935} \\ \ell_{2699} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{268929} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{268929} = \mathbf{Pl}(41, 23, 42, 23, 1, 0)_{1109093} \\ \ell_{2699} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^$$

$$\ell_{2098} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{4} \\ 0 & 1 & 1 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{4262657} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{4202657} = \mathbf{PI}(41, 23, 19, 23, 1, 0)_{108846}$$

$$\ell_{2099} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{11985217} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{11985217} = \mathbf{PI}(41, 23, 4, 23, 1, 0)_{109350}$$

$$\ell_{2700} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{3198225} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{3196225} = \mathbf{PI}(41, 23, 27, 23, 1, 0)_{109350}$$

$$\ell_{2701} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{7190721} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{7190721} = \mathbf{PI}(41, 23, 12, 23, 1, 0)_{109405}$$

$$\ell_{2702} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{12519041} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{12519041} = \mathbf{PI}(41, 23, 33, 23, 1, 0)_{109791}$$

$$\ell_{2703} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{12519041} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{9854657} = \mathbf{PI}(41, 23, 34, 23, 1, 0)_{109791}$$

$$\ell_{2704} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{2313129} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{2131329} = \mathbf{PI}(41, 23, 34, 23, 1, 0)_{109791}$$

$$\ell_{2705} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{66} \end{bmatrix}_{10120321} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{10120321} = \mathbf{PI}(41, 23, 8, 23, 1, 0)_{109133}$$

$$\ell_{2706} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{66} \end{bmatrix}_{10120321} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{10120321} = \mathbf{PI}(41, 23, 31, 23, 1, 0)_{109153}$$

$$\ell_{2707} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{1020513} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{1601153} = \mathbf{PI}(41, 23, 31, 23, 1, 0)_{109728}$$

$$\ell_{2710} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{10720513} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{11720513} = \mathbf{PI}(41, 23, 24, 23, 1, 0)_{1010514}$$

$$\ell_{2711} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10388225} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{10905077} = \mathbf{PI}(41, 23, 37, 23, 1, 0)_{109342}$$

$$\ell_{2712} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{105805041} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{10905041} = \mathbf{PI}(41, 23, 45, 23, 1,$$

$$\begin{split} \ell_{2719} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{8} \end{bmatrix}_{2399233} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{2399233} = \mathbf{Pl}(41, 23, 20, 23, 1, 0)_{108909} \\ \ell_{2720} &= \begin{bmatrix} 1 & 0 & 0 & e^{22} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{5060161} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{5060161} = \mathbf{Pl}(41, 23, 16, 23, 1, 0)_{108657} \\ \ell_{2721} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{15981121} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{15981121} = \mathbf{Pl}(41, 23, 7, 23, 1, 0)_{108090} \\ \ell_{2722} &= \begin{bmatrix} 1 & 0 & 0 & e^{14} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{1547233} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{15447233} = \mathbf{Pl}(41, 23, 62, 23, 1, 0)_{11555} \\ \ell_{2723} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{33316673} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{33316673} = \mathbf{Pl}(41, 23, 41, 23, 1, 0)_{10232} \\ \ell_{2724} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{32} \end{bmatrix}_{3039729} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{800577} = \mathbf{Pl}(41, 23, 13, 23, 1, 0)_{108488} \\ \ell_{2725} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{5861249} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{13049729} = \mathbf{Pl}(41, 23, 35, 23, 1, 0)_{109854} \\ \ell_{2726} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{10655617} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{10655617} = \mathbf{Pl}(41, 23, 35, 23, 1, 0)_{10995} \\ \ell_{2728} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{2930625} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{10655617} = \mathbf{Pl}(41, 23, 39, 23, 1, 0)_{100639} \\ \ell_{2730} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{2930625} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{3731969} = \mathbf{Pl}(41, 23, 39, 23, 1, 0)_{100639} \\ \ell_{2732} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{3145939} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 2^{1} \end{bmatrix}_{2930625} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 2^{1} \end{bmatrix}_{2930625} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 2^{1} \end{bmatrix}_{2930625} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 2^{1} \end{bmatrix}_{3731969} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 5^{1} \end{bmatrix}_{3237809} = \mathbf{Pl}(41, 23, 39, 23, 1, 0)_{100539} \\ \ell_{2732} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{31459399} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{3237809} = \mathbf{Pl}(41, 23,$$

$$\begin{split} \ell_{2740} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^6 \\ 0 & 1 & 1 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{8789121} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{8780121} = \mathbf{Pl}(41, 23, 44, 23, 1, 0)_{110421} \\ \ell_{2741} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{8256385} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{8256385} = \mathbf{Pl}(41, 23, 21, 23, 1, 0)_{108972} \\ \ell_{2742} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{15715009} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{15715009} = \mathbf{Pl}(41, 23, 2, 23, 1, 0)_{108077} \\ \ell_{2743} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{14381441} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{14381441} = \mathbf{Pl}(41, 23, 62, 23, 1, 0)_{108027} \\ \ell_{2744} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{11453889} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{14381441} = \mathbf{Pl}(41, 23, 40, 23, 1, 0)_{108027} \\ \ell_{2745} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{7} \end{bmatrix}_{13850019} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13850049} = \mathbf{Pl}(41, 23, 40, 23, 1, 0)_{10109} \\ \ell_{2746} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{11185089} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{15170521} = \mathbf{Pl}(41, 23, 32, 23, 1, 0)_{109665} \\ \ell_{2747} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{14915713} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{14915713} = \mathbf{Pl}(41, 23, 55, 23, 1, 0)_{111114} \\ \ell_{2749} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{13855473} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{13858473} = \mathbf{Pl}(41, 23, 25, 23, 1, 0)_{109224} \\ \ell_{2751} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{138465} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{13858473} = \mathbf{Pl}(41, 23, 55, 23, 1, 0)_{109246} \\ \ell_{2755} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1334465} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{14879735} = \mathbf{Pl}(41, 23, 55, 23, 1, 0)_{109327} \\ \ell_{2755} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1341741} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{14117441} = \mathbf{Pl}(41, 23, 55, 55, 55, 1, 0)_{238060} \\ \ell_{2757} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{14117441} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{14117441} = \mathbf{Pl}(42, 55, 55, 55, 51, 0)_{23$$

$$\ell_{2761} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{10778625} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{16778625} = \mathbf{PI}(42, 55, 41, 55, 1, 0)_{237241}$$

$$\ell_{2762} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{4} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{1263681} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{1283681} = \mathbf{PI}(42, 55, 17, 55, 1, 0)_{237529}$$

$$\ell_{2763} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{11984577} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{11984577} = \mathbf{PI}(42, 55, 38, 55, 1, 0)_{237052}$$

$$\ell_{2764} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{3197505} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{3197005} = \mathbf{PI}(42, 55, 60, 55, 1, 0)_{238438}$$

$$\ell_{2765} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{12520065} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{12520065} = \mathbf{PI}(42, 55, 51, 55, 1, 0)_{237871}$$

$$\ell_{2766} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{12520065} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{9854785} = \mathbf{PI}(42, 55, 54, 55, 1, 0)_{237871}$$

$$\ell_{2768} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{2131841} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{2131841} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{6924865} = \mathbf{PI}(42, 55, 45, 55, 1, 0)_{23690}$$

$$\ell_{2770} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{10120001} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{10120001} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 & 3 \end{bmatrix}_{10120001} = \mathbf{PI}(42, 55, 26, 55, 1, 0)_{236296}$$

$$\ell_{2771} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{101793} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{11719681} = \mathbf{PI}(42, 55, 26, 55, 1, 0)_{236296}$$

$$\ell_{2774} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1601793} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{1601793} = \mathbf{PI}(42, 55, 26, 55, 1, 0)_{236296}$$

$$\ell_{2776} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{16246721} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{16246721} = \mathbf{PI}(42, 55, 26, 55, 1, 0)_{236296}$$

$$\ell_{2776} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{16246721} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{16246721} = \mathbf{PI}(42, 55, 26, 55, 1, 0)_{23699}$$

$$\ell_{2776} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{20}$$

$$\begin{split} \ell_{2782} &= \begin{bmatrix} 1 & 0 & 0 & 0 & c^{34} \\ 0 & 1 & 1 & c^{47} \end{bmatrix}_{3465473} = \begin{bmatrix} 1 & 0 & 0 & 0 & 13 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{3465473} = \mathbf{PI}(42,55,42,55,1,0)_{237304} \\ \ell_{2783} &= \begin{bmatrix} 1 & 0 & 0 & c^{24} \\ 0 & 1 & 1 & c^{38} \end{bmatrix}_{2400577} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{2400577} = \mathbf{PI}(42,55,29,55,1,0)_{236485} \\ \ell_{2784} &= \begin{bmatrix} 1 & 0 & 0 & c^{22} \\ 0 & 1 & 1 & c^{38} \end{bmatrix}_{5063041} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{5063041} = \mathbf{PI}(42,55,59,55,1,0)_{238375} \\ \ell_{2785} &= \begin{bmatrix} 1 & 0 & 0 & c^{16} \\ 0 & 1 & 1 & c^{3} \end{bmatrix}_{15978753} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 5^{4} \end{bmatrix}_{15978753} = \mathbf{PI}(42,55,52,55,1,0)_{235414} \\ \ell_{2786} &= \begin{bmatrix} 1 & 0 & 0 & c^{14} \\ 0 & 1 & 1 & c^{5} \end{bmatrix}_{13317249} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 5^{4} \end{bmatrix}_{15440089} = \mathbf{PI}(42,55,52,55,1,0)_{237934} \\ \ell_{2787} &= \begin{bmatrix} 1 & 0 & 0 & c^{52} \\ 0 & 1 & 1 & c^{11} \end{bmatrix}_{300807} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{300897} = \mathbf{PI}(42,55,50,55,1,0)_{237808} \\ \ell_{2789} &= \begin{bmatrix} 1 & 0 & 0 & c^{57} \\ 0 & 1 & 1 & c^{35} \end{bmatrix}_{13317249} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{13052929} = \mathbf{PI}(42,55,55,55,1,0)_{234973} \\ \ell_{2790} &= \begin{bmatrix} 1 & 0 & 0 & c^{16} \\ 0 & 1 & 1 & c^{35} \end{bmatrix}_{13052929} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{3052929} = \mathbf{PI}(42,55,56,55,1,0)_{234837} \\ \ell_{2792} &= \begin{bmatrix} 1 & 0 & 0 & c^{56} \\ 0 & 1 & 1 & c^{33} \end{bmatrix}_{12251073} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{12055169} = \mathbf{PI}(42,55,44,55,1,0)_{235288} \\ \ell_{2792} &= \begin{bmatrix} 1 & 0 & 0 & c^{66} \\ 0 & 1 & 1 & c^{34} \end{bmatrix}_{2229921} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{2029921} = \mathbf{PI}(42,55,35,55,1,0)_{235883} \\ \ell_{2794} &= \begin{bmatrix} 1 & 0 & 0 & c^{66} \\ 0 & 1 & 1 & c^{34} \end{bmatrix}_{2929921} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{2029921} = \mathbf{PI}(42,55,35,55,1,0)_{2358918} \\ \ell_{2795} &= \begin{bmatrix} 1 & 0 & 0 & c^{66} \\ 0 & 1 & 1 & c^{46} \end{bmatrix}_{3730817} = \mathbf{PI}(42,55,35,55,1,0)_{235289} \\ \ell_{2797} &= \begin{bmatrix} 1 & 0 & 0 & c^{46} \\ 0 & 1 & 1 & c^{43} \end{bmatrix}_{3923073} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{3663299} = \mathbf{PI}(42,55,16,55,1,0)_{2352919} \\ \ell_{2797} &= \begin{bmatrix} 1 & 0 & 0 & c^{46} \\ 0 & 1 & 1 & c^{42} \end{bmatrix}_{6185577} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 5^{6} \end{bmatrix}_{3823073} = \mathbf{PI}$$

$$\begin{split} \ell_{2803} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{536001} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{536001} = \mathbf{PI}(42,55,43,55,1,0)_{237367} \\ \ell_{2804} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{0} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{8258369} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{8789249} = \mathbf{PI}(42,55,28,55,1,0)_{236422} \\ \ell_{2805} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{8258369} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{8258369} = \mathbf{PI}(42,55,36,55,1,0)_{236926} \\ \ell_{2806} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{15713729} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{15713729} = \mathbf{PI}(42,55,53,55,1,0)_{235855} \\ \ell_{2807} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{14343169} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{14383169} = \mathbf{PI}(42,55,2,55,1,0)_{234784} \\ \ell_{2809} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{1154342} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{1454145} = \mathbf{PI}(42,55,2,55,1,0)_{234784} \\ \ell_{2809} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{13849729} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{11186433} = \mathbf{PI}(42,55,53,55,1,0)_{235477} \\ \ell_{2811} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{15181953} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{15181953} = \mathbf{PI}(42,55,23,55,1,0)_{236170} \\ \ell_{2812} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{1983217} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{1693217} = \mathbf{PI}(42,55,23,55,1,0)_{236170} \\ \ell_{2814} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{789377} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{7893277} = \mathbf{PI}(42,55,47,55,1,0)_{236170} \\ \ell_{2814} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{13582145} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{13582145} = \mathbf{PI}(42,55,57,57,55,1,0)_{237019} \\ \ell_{2815} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{13582145} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{13582145} = \mathbf{PI}(42,55,6,55,1,0)_{238524} \\ \ell_{2816} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{1495073} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{4795073} = \mathbf{PI}(42,55,6,55,1,0)_{238524} \\ \ell_{2818} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{6658625} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 &$$

$$\ell_{2824} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{6393473} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{6393473} = \mathbf{Pl}(43, 53, 22, 53, 1, 0)_{228107}$$

$$\ell_{2825} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{10779713} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{10779713} = \mathbf{Pl}(43, 53, 35, 53, 1, 0)_{228248}$$

$$\ell_{2826} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{4264705} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{4264705} = \mathbf{Pl}(43, 53, 29, 53, 1, 0)_{228548}$$

$$\ell_{2827} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{70} \end{bmatrix}_{11985921} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{11985921} = \mathbf{Pl}(43, 53, 40, 53, 1, 0)_{229241}$$

$$\ell_{2828} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{3196737} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{3196737} = \mathbf{Pl}(43, 53, 44, 53, 1, 0)_{228296}$$

$$\ell_{2829} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{7194177} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{7194177} = \mathbf{Pl}(43, 53, 25, 53, 1, 0)_{228296}$$

$$\ell_{2830} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{12517569} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{9857153} = \mathbf{Pl}(43, 53, 39, 53, 1, 0)_{227855}$$

$$\ell_{2832} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{12517569} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{9857153} = \mathbf{Pl}(43, 53, 18, 53, 1, 0)_{227865}$$

$$\ell_{2832} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{1232353} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{2122355} = \mathbf{Pl}(43, 53, 15, 53, 1, 0)_{227865}$$

$$\ell_{2834} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{10121665} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{5593921} = \mathbf{Pl}(43, 53, 49, 53, 1, 0)_{229808}$$

$$\ell_{2834} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{10121665} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{5693921} = \mathbf{Pl}(43, 53, 49, 53, 1, 0)_{229808}$$

$$\ell_{2836} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{6} \end{bmatrix}_{10246529} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{5693921} = \mathbf{Pl}(43, 53, 49, 53, 1, 0)_{229477}$$

$$\ell_{2839} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{16246529} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{11717889} = \mathbf{Pl}(43, 53, 59, 53, 1, 0)_{229871}$$

$$\ell_{2830}$$

$$\begin{split} \ell_{2845} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{16511041} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{16511041} = \mathbf{PI}(43,53,32,53,1,0)_{228737} \\ \ell_{2846} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{3465605} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{3405605} = \mathbf{PI}(43,53,30,53,1,0)_{228611} \\ \ell_{2847} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{2400129} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{2400129} = \mathbf{PI}(43,53,34,53,1,0)_{229430} \\ \ell_{2848} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{5061825} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{5061825} = \mathbf{PI}(43,53,3,53,1,0)_{220910} \\ \ell_{2849} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{1581509} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{15981509} = \mathbf{PI}(43,53,54,53,1,0)_{230123} \\ \ell_{2850} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{15446401} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{15446401} = \mathbf{PI}(43,53,8,53,1,0)_{227225} \\ \ell_{2851} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{13316333} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{33316333} = \mathbf{PI}(43,53,19,53,1,0)_{227225} \\ \ell_{2852} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{3049793} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{13049793} = \mathbf{PI}(43,53,38,53,1,0)_{229115} \\ \ell_{2854} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3652609} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{30652609} = \mathbf{PI}(43,53,48,53,1,0)_{229356} \\ \ell_{2855} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3229473} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{3229473} = \mathbf{PI}(43,53,48,53,1,0)_{229736} \\ \ell_{2859} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3330699} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{3230947} = \mathbf{PI}(43,53,14,53,1,0)_{227036} \\ \ell_{2860} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3330699} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{32309479} = \mathbf{PI}(43,53,41,53,1,0)_{227036} \\ \ell_{2860} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3330699} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{3230475} = \mathbf{PI}(43,53,59,53,1,0)_{230438} \\ \ell_{2860} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3230991} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0$$

$$\begin{split} \ell_{2866} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{37} \end{bmatrix}_{2665665} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{2665665} = \mathbf{PI}(43, 53, 23, 53, 1, 0)_{228170} \\ \ell_{2867} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{8791233} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{536129} = \mathbf{PI}(43, 53, 42, 53, 1, 0)_{229674} \\ \ell_{2868} &= \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{8791233} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{8791233} = \mathbf{PI}(43, 53, 31, 53, 1, 0)_{228604} \\ \ell_{2869} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{8258561} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{8258561} = \mathbf{PI}(43, 53, 33, 53, 1, 0)_{228800} \\ \ell_{2870} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{15714433} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{14382273} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1458201} = \mathbf{PI}(43, 53, 60, 53, 1, 0)_{227981} \\ \ell_{2871} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{11452801} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1452821} = \mathbf{PI}(43, 53, 9, 53, 1, 0)_{227288} \\ \ell_{2873} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{49} \end{bmatrix}_{13850497} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{11187841} = \mathbf{PI}(43, 53, 2, 53, 1, 0)_{226847} \\ \ell_{2874} &= \begin{bmatrix} 1 & 0 & 0 & e^{21} \\ 0 & 1 & 1 & e^{49} \end{bmatrix}_{15180353} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{11187841} = \mathbf{PI}(43, 53, 2, 53, 1, 0)_{226847} \\ \ell_{2876} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14916801} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{14916801} = \mathbf{PI}(43, 53, 5, 53, 1, 0)_{229634} \\ \ell_{2877} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14916801} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{13850497} = \mathbf{PI}(43, 53, 5, 5, 5, 1, 0)_{229634} \\ \ell_{2877} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14916801} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{14916801} = \mathbf{PI}(43, 53, 5, 5, 5, 3, 1, 0)_{229634} \\ \ell_{2879} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14916801} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{7723201} = \mathbf{PI}(43, 53, 5, 5, 5, 3, 1, 0)_{2297279} \\ \ell_{2880} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{14916917} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{13333825$$

$$\begin{split} &\ell_{2887} = \begin{bmatrix} 1 & 0 & 0 & e^5 \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{8525505} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{8525505} = PI(44,17,51,17,1,0)_{87011} \\ &\ell_{2888} = \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{6392001} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{6392001} \\ &\ell_{2889} = \begin{bmatrix} 1 & 0 & 0 & e^{10} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{16780099} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{16780699} = PI(44,17,52,17,1,0)_{87114} \\ &\ell_{2880} = \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{16780699} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{16780699} = PI(44,17,71,1,0)_{84279} \\ &\ell_{2891} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{11985857} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{11985857} = PI(44,17,22,17,1,0)_{85224} \\ &\ell_{2892} = \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{11982897} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{11985857} = PI(44,17,33,17,1,0)_{86347} \\ &\ell_{2893} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{7192129} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{3199041} = PI(44,17,38,17,1,0)_{86347} \\ &\ell_{2894} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{7192129} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{12518017} = PI(44,17,9,17,1,0)_{84405} \\ &\ell_{2895} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{9853505} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{9853505} = PI(44,17,24,17,1,0)_{85350} \\ &\ell_{2896} = \begin{bmatrix} 1 & 0 & 0 & e^{32} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{9853505} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{2132865} = PI(44,17,14,17,1,0)_{86701} \\ &\ell_{2897} = \begin{bmatrix} 1 & 0 & 0 & e^{223} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{9853505} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{6927105} = PI(44,17,44,17,1,0)_{8670} \\ &\ell_{2899} = \begin{bmatrix} 1 & 0 & 0 & e^{223} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{10120641} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10120641} = PI(44,17,61,17,1,0)_{8703} \\ &\ell_{2900} = \begin{bmatrix} 1 & 0 & 0 & e^{220} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{11718273} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{11718273} = PI(44,17,3,17,1,0)_{86209} \\ &\ell_{2901} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{10718273} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10120641} = PI(44,17,4,17,1,1,0)_{86209} \\ &\ell_{2902} = \begin{bmatrix} 1 & 0 & 0 & e$$

$$\begin{split} &\ell_{2908} = \begin{bmatrix} 1 & 0 & 0 & e^2 \\ 0 & 1 & 1 & e^{22} \end{bmatrix}_{1006433} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{1006433} = PI(44,17,28,17,1,0)_{85002} \\ &\ell_{2909} = \begin{bmatrix} 1 & 0 & 0 & e^{12} \\ 0 & 1 & 1 & e^{312} \end{bmatrix}_{16512513} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{16512513} = PI(44,17,13,17,1,0)_{84657} \\ &\ell_{2910} = \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{3463553} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{3463553} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & e^{51} \end{bmatrix}_{3463553} = PI(44,17,62,17,1,0)_{87744} \\ &\ell_{2911} = \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{2397377} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{2397377} = PI(44,17,47,17,1,0)_{86799} \\ &\ell_{2912} = \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{15080481} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{15080481} = PI(44,17,57,17,1,0)_{87429} \\ &\ell_{2913} = \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{15080481} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{15486209} = PI(44,17,27,17,1,0)_{85389} \\ &\ell_{2914} = \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{9} \end{bmatrix}_{13318209} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{15446209} = PI(44,17,10,17,1,0)_{85488} \\ &\ell_{2915} = \begin{bmatrix} 1 & 0 & 0 & e^{68} \\ 0 & 1 & 1 & e^{9} \end{bmatrix}_{13318209} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{300257} = PI(44,17,10,17,1,0)_{84488} \\ &\ell_{2916} = \begin{bmatrix} 1 & 0 & 0 & e^{67} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{300257} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{300257} = PI(44,17,10,17,1,0)_{84783} \\ &\ell_{2917} = \begin{bmatrix} 1 & 0 & 0 & e^{67} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{10654017} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{10054017} = PI(44,17,45,17,1,0)_{8673} \\ &\ell_{2919} = \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{10654017} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{10054017} = PI(44,17,42,17,1,0)_{86344} \\ &\ell_{2922} = \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{3233509} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{10054017} = PI(44,17,42,17,1,0)_{86344} \\ &\ell_{2922} = \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{3233509} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{2932609} = PI(44,17,42,17,1,0)_{86344} \\ &\ell_{2922} = \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{3333509} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0$$

$$\begin{split} &\ell_{2929} = \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{0580505} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{9580505} = \mathbf{PI}(44,17,35,17,1,0)_{86043} \\ &\ell_{2930} = \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{2665025} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{2665025} = \mathbf{PI}(44,17,50,17,1,0)_{86088} \\ &\ell_{2931} = \begin{bmatrix} 1 & 0 & 0 & e^{6} \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{5365057} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{536257} = \mathbf{PI}(44,17,56,17,1,0)_{87366} \\ &\ell_{2932} = \begin{bmatrix} 1 & 0 & 0 & e^{6} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{8250257} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{8789505} = \mathbf{PI}(44,17,26,17,1,0)_{85476} \\ &\ell_{2933} = \begin{bmatrix} 1 & 0 & 0 & e^{6} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{8250257} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{8256257} = \mathbf{PI}(44,17,26,17,1,0)_{85476} \\ &\ell_{2934} = \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{15714305} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{15714305} = \mathbf{PI}(44,17,29,17,1,0)_{85655} \\ &\ell_{2935} = \begin{bmatrix} 1 & 0 & 0 & e^{30} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1451585} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{1451585} = \mathbf{PI}(44,17,29,17,1,0)_{85665} \\ &\ell_{2937} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1451585} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13848129} = \mathbf{PI}(44,17,63,17,1,0)_{87807} \\ &\ell_{2939} = \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1451697} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{13848129} = \mathbf{PI}(44,17,11,17,1,0)_{86736} \\ &\ell_{2939} = \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{1451697} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{1187073} = \mathbf{PI}(44,17,11,1,0)_{86936} \\ &\ell_{2940} = \begin{bmatrix} 1 & 0 & 0 & e^{21} \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{14916097} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{1518121} = \mathbf{PI}(44,17,2,17,1,0)_{85946} \\ &\ell_{2941} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{7796123} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{33818097} = \mathbf{PI}(44,17,3,1,1,1,0)_{85946} \\ &\ell_{2942} = \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{37891233} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{33818097} = \mathbf{PI}(44,17,3,1,1,1,0)_{85946} \\ &\ell_{2944} = \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{37891233} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{33816$$

$$\begin{split} \ell_{2950} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{12785025} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{12785025} = \mathbf{PI}(45,7,14,7,1,0)_{45031} \\ \ell_{2951} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{5} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{8523457} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{8523457} = \mathbf{PI}(45,7,9,7,1,0)_{44716} \\ \ell_{2952} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{6392513} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{6392513} = \mathbf{PI}(45,7,28,7,1,0)_{45913} \\ \ell_{2953} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{16777729} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 6^{10} \end{bmatrix}_{16777729} = \mathbf{PI}(45,7,28,7,1,0)_{45850} \\ \ell_{2954} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{248} \end{bmatrix}_{11984641} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{1984641} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{1984641} = \mathbf{PI}(45,7,21,7,1,0)_{45472} \\ \ell_{2956} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{3199297} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{3199297} = \mathbf{PI}(45,7,56,7,1,0)_{47677} \\ \ell_{2957} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{319519617} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{12519617} = \mathbf{PI}(45,7,54,7,1,0)_{47514} \\ \ell_{2960} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{9855361} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{12519617} = \mathbf{PI}(45,7,36,7,1,0)_{46117} \\ \ell_{2961} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{3} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{9855361} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{2133377} = \mathbf{PI}(45,7,36,7,1,0)_{46147} \\ \ell_{2961} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{9855361} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{2133377} = \mathbf{PI}(45,7,36,7,1,0)_{46195} \\ \ell_{2962} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{9855331} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{2133377} = \mathbf{PI}(45,7,36,7,1,0)_{46195} \\ \ell_{2961} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{36} \end{bmatrix}_{1023073} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{2133377} = \mathbf{PI}(45,7,42,7,1,0)_{46984} \\ \ell_{2962} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{16247745} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{11719533} = \mathbf{PI}(45,7,22,7,1,0)_{45535} \\ \ell_{2965} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{1624774$$

$$\begin{split} \ell_{2971} &= \begin{bmatrix} 1 & 0 & 0 & e^{37} \\ 0 & 1 & 1 & e^{61} \end{bmatrix}_{10920001} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{10920001} = \mathbf{Pl}(45, 7, 4, 7, 1, 0)_{44401} \\ \ell_{2972} &= \begin{bmatrix} 1 & 0 & 0 & e^{2} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{1066689} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{1066689} = \mathbf{Pl}(45, 7, 41, 7, 1, 0)_{46732} \\ \ell_{2973} &= \begin{bmatrix} 1 & 0 & 0 & e^{12} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{16513153} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{16513153} = \mathbf{Pl}(45, 7, 46, 7, 1, 0)_{47047} \\ \ell_{2974} &= \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{3463233} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{3463233} = \mathbf{Pl}(45, 7, 39, 7, 1, 0)_{46066} \\ \ell_{2975} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{3369229} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{3463233} = \mathbf{Pl}(45, 7, 32, 7, 1, 0)_{46165} \\ \ell_{2976} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{48} \end{bmatrix}_{5662529} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{5662529} = \mathbf{Pl}(45, 7, 53, 7, 1, 0)_{47488} \\ \ell_{2977} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{1548897} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{15980225} = \mathbf{Pl}(45, 7, 59, 7, 1, 0)_{47299} \\ \ell_{2978} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{13317057} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{13317057} = \mathbf{Pl}(45, 7, 30, 7, 1, 0)_{47929} \\ \ell_{2980} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{3009021} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{13317057} = \mathbf{Pl}(45, 7, 34, 7, 1, 0)_{46291} \\ \ell_{2981} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{3009021} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{300901} = \mathbf{Pl}(45, 7, 37, 7, 1, 0)_{46480} \\ \ell_{2982} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{17} \end{bmatrix}_{10655553} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{10555553} = \mathbf{Pl}(45, 7, 62, 7, 1, 0)_{47929} \\ \ell_{2984} &= \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{32251585} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{32251585} = \mathbf{Pl}(45, 7, 62, 7, 1, 0)_{479740} \\ \ell_{2987} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{3} \end{bmatrix}_{322473} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{3221473} = \mathbf{Pl}(45, 7, 29, 7, 1, 0)_{46976} \\ \ell_{2989} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{8} \end{bmatrix}_{3$$

$$\begin{split} \ell_{2992} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1864193} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1864193} = \mathbf{PI}(45,7,1,7,1,0)_{44212} \\ \ell_{2903} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{9587713} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 1 & 0 & 1 & 1 & 2 \end{bmatrix}_{9587713} = \mathbf{PI}(45,7,8,7,1,0)_{4653} \\ \ell_{2904} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{2664385} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{2664385} = \mathbf{PI}(45,7,51,7,1,0)_{45094} \\ \ell_{2905} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{536385} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{536385} = \mathbf{PI}(45,7,51,7,1,0)_{47962} \\ \ell_{2996} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{8791489} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{8791489} = \mathbf{PI}(45,7,52,7,1,0)_{47922} \\ \ell_{2997} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{15713857} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{15713857} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{14381057} = \mathbf{PI}(45,7,47,7,1,0)_{4710} \\ \ell_{3000} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{1453313} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{11453313} = \mathbf{PI}(45,7,33,7,1,0)_{46228} \\ \ell_{3001} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{11185665} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{1185665} = \mathbf{PI}(45,7,12,7,1,0)_{44905} \\ \ell_{3003} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{14913537} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 64 \end{bmatrix}_{14913537} = \mathbf{PI}(45,7,12,7,1,0)_{44905} \\ \ell_{3005} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{14913537} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{1993153} = \mathbf{PI}(45,7,2,7,1,0)_{44905} \\ \ell_{3006} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{14913537} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{7993153} = \mathbf{PI}(45,7,2,7,1,0)_{44905} \\ \ell_{3007} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{14913537} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{7993153} = \mathbf{PI}(45,7,2,7,1,0)_{4509} \\ \ell_{3007} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1493537} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{7933153} = \mathbf{PI}(45,7,2,7,1,0)_{4509} \\ \ell_{3007} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1335233} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 &$$

$$\begin{split} \ell_{3013} &= \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{260249} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{260249} = \mathbf{Pl}(46, 36, 36, 1, 0)_{161519} \\ \ell_{3014} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{1278005} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{12784065} = \mathbf{Pl}(46, 36, 41, 36, 1, 0)_{161834} \\ \ell_{3015} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{5} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{8523393} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{8523393} = \mathbf{Pl}(46, 36, 13, 36, 1, 0)_{160070} \\ \ell_{3016} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{6395073} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{6395073} = \mathbf{Pl}(46, 36, 51, 36, 1, 0)_{160404} \\ \ell_{3017} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{16770777} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{4261697} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{4201697} = \mathbf{Pl}(46, 36, 23, 36, 1, 0)_{160899} \\ \ell_{3019} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{11985281} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{3198529} = \mathbf{Pl}(46, 36, 62, 36, 1, 0)_{163187} \\ \ell_{3020} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{3198529} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{3198529} = \mathbf{Pl}(46, 36, 62, 36, 1, 0)_{16496} \\ \ell_{3021} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{7192709} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{7192709} = \mathbf{Pl}(46, 36, 35, 36, 1, 0)_{16446} \\ \ell_{3022} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{2518593} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{9856237} = \mathbf{Pl}(46, 36, 46, 36, 1, 0)_{162149} \\ \ell_{3023} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{2133889} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{9856237} = \mathbf{Pl}(46, 36, 10, 36, 1, 0)_{162149} \\ \ell_{3024} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{2133889} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{2133889} = \mathbf{Pl}(46, 36, 52, 36, 1, 0)_{162527} \\ \ell_{3025} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{1023393} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{2133889} = \mathbf{Pl}(46, 36, 29, 36, 1, 0)_{161078} \\ \ell_{3026} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1600257} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{1023393} = \mathbf{Pl}(46, 36, 29, 36, 1, 0)_{16$$

$$\begin{split} \ell_{3034} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{8} \end{bmatrix}_{9056833} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{9056833} = \mathbf{Pl}(46, 36, 20, 36, 1, 0)_{160511} \\ \ell_{3035} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{2} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{10918593} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{10918593} = \mathbf{Pl}(46, 36, 48, 36, 1, 0)_{162275} \\ \ell_{3036} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1066945} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{1066945} = \mathbf{Pl}(46, 36, 9, 36, 1, 0)_{159818} \\ \ell_{3037} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{16511297} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{16511297} = \mathbf{Pl}(46, 36, 45, 36, 1, 0)_{162086} \\ \ell_{3038} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{3462145} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{2398273} = \mathbf{Pl}(46, 36, 32, 36, 1, 0)_{162087} \\ \ell_{3039} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{2398273} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{3661697} = \mathbf{Pl}(46, 36, 58, 36, 1, 0)_{161295} \\ \ell_{3041} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{15981953} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{15981953} = \mathbf{Pl}(46, 36, 9, 36, 1, 0)_{16144} \\ \ell_{3042} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{15447425} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{15447425} = \mathbf{Pl}(46, 36, 19, 36, 1, 0)_{160448} \\ \ell_{3043} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{33317889} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{15447425} = \mathbf{Pl}(46, 36, 55, 36, 1, 0)_{162716} \\ \ell_{3044} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{3052545} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{13052545} = \mathbf{Pl}(46, 36, 53, 36, 1, 0)_{162779} \\ \ell_{3045} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{32250625} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{10544747} = \mathbf{Pl}(46, 36, 53, 36, 1, 0)_{16279} \\ \ell_{3045} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{32250625} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{1054779} = \mathbf{Pl}(46, 36, 53, 36, 1, 0)_{162290} \\ \ell_{3048} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{3729281} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{37293713} = \mathbf{Pl}(46, 36, 6, 36, 1, 0)_{16292} \\ \ell_{3049} &= \begin{bmatrix} 1 & 0 & 0 &$$

$$\begin{split} \ell_{3055} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{14116289} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{14116289} = \mathbf{PI}(46, 36, 22, 36, 1, 0)_{160637} \\ \ell_{3056} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{3} \end{bmatrix}_{1829409} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{4529409} = \mathbf{PI}(46, 36, 40, 36, 1, 0)_{161717} \\ \ell_{3057} &= \begin{bmatrix} 1 & 0 & 0 & e^{39} \\ 0 & 1 & 1 & e^{3} \end{bmatrix}_{1864641} = \begin{bmatrix} 1 & 0 & 0 & 7 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{1864641} = \mathbf{PI}(46, 36, 12, 36, 1, 0)_{160007} \\ \ell_{3058} &= \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{9587009} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{9587009} = \mathbf{PI}(46, 36, 13, 36, 1, 0)_{1603514} \\ \ell_{3050} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{356513} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{8791361} = \mathbf{PI}(46, 36, 54, 36, 1, 0)_{162653} \\ \ell_{3060} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{15715137} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{15715137} = \mathbf{PI}(46, 36, 59, 36, 1, 0)_{161204} \\ \ell_{3063} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{15715137} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{14383553} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{14383553} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{13848577} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{13848577} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{13848577} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{14915137} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{14915137} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1185857} = \mathbf{PI}(46, 36, 34, 36, 1, 0)_{162023} \\ \ell_{3068} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{14915137} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{11185857} = \mathbf{PI}(46, 36, 44, 36, 1, 0)_{162023} \\ \ell_{3069} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{14915137} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14915137} = \mathbf{PI}(46, 36, 44, 36, 1, 0)_{162033} \\ \ell_{3070} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{14915137} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14915137} = \mathbf{PI}(46, 36, 24, 36, 1, 0)_{16233} \\ \ell_{3070} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{14915137} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14915137} = \mathbf{PI}(46,$$

$$\begin{split} &\ell_{3076} = \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{0589313} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{9589313} = PI(47, 10, 11, 10, 1, 0)_{56751} \\ &\ell_{3077} = \begin{bmatrix} 1 & 0 & 0 & e^{10} \\ 0 & 1 & 1 & e^{3} \end{bmatrix}_{269313} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{12785089} = PI(47, 10, 10, 10, 1, 0)_{56888} \\ &\ell_{3078} = \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{8} \end{bmatrix}_{12785089} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{12785089} = PI(47, 10, 20, 10, 1, 0)_{57318} \\ &\ell_{3079} = \begin{bmatrix} 1 & 0 & 0 & e^{6} \\ 0 & 1 & 1 & e^{11} \end{bmatrix}_{5525441} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{3525441} = PI(47, 10, 30, 10, 1, 0)_{57948} \\ &\ell_{3080} = \begin{bmatrix} 1 & 0 & 0 & e^{10} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{16778561} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{16778561} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{16778561} = PI(47, 10, 34, 10, 1, 0)_{58200} \\ &\ell_{3082} = \begin{bmatrix} 1 & 0 & 0 & e^{4} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{11987009} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{11987009} = PI(47, 10, 54, 10, 1, 0)_{59450} \\ &\ell_{3084} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{3197701} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{3197761} = PI(47, 10, 49, 10, 1, 0)_{59450} \\ &\ell_{3085} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{12516993} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{12516993} = PI(47, 10, 59, 10, 1, 0)_{59775} \\ &\ell_{3086} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{9853889} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{9853889} = PI(47, 10, 47, 10, 1, 0)_{59633} \\ &\ell_{3089} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{9853889} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{9853889} = PI(47, 10, 10, 10, 10, 10)_{57225} \\ &\ell_{3090} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{5595265} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{10122127} = PI(47, 10, 10, 10, 10, 10)_{56499} \\ &\ell_{3091} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{5595265} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{5595265} = PI(47, 10, 10, 10, 10, 10)_{56277} \\ &\ell_{3093} = \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{5595265} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{5595265} = PI(47, 10, 10, 10, 10, 10)_{56499} \\ &\ell_{3094} = \begin{bmatrix} 1 & 0$$

$$\begin{split} \ell_{3097} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{3997697} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{3997697} = PI(47, 10, 33, 10, 1, 0)_{58137} \\ \ell_{3098} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & 5 \end{bmatrix}_{9054657} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{9054657} = PI(47, 10, 63, 10, 1, 0)_{60027} \\ \ell_{3099} &= \begin{bmatrix} 1 & 0 & 0 & e^{37} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{10921217} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{10921217} = PI(47, 10, 53, 10, 1, 0)_{59397} \\ \ell_{3100} &= \begin{bmatrix} 1 & 0 & 0 & e^{12} \\ 0 & 1 & 1 & e^{11} \end{bmatrix}_{1067201} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{1067201} = PI(47, 10, 50, 10, 1, 0)_{59208} \\ \ell_{3101} &= \begin{bmatrix} 1 & 0 & 0 & e^{12} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{16514497} = \begin{bmatrix} 1 & 0 & 0 & 4 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{16514497} = PI(47, 10, 56, 10, 1, 0)_{59386} \\ \ell_{3102} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{3402849} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3402849} = PI(47, 10, 38, 10, 1, 0)_{58452} \\ \ell_{3103} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{3606009} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{3606009} = PI(47, 10, 44, 10, 1, 0)_{57666} \\ \ell_{3104} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{15978025} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{15978025} = PI(47, 10, 16, 10, 1, 0)_{57666} \\ \ell_{3105} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{13316737} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{13316737} = PI(47, 10, 4, 10, 1, 0)_{56436} \\ \ell_{3109} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{1304909} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{130634909} = PI(47, 10, 18, 10, 1, 0)_{56436} \\ \ell_{3110} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{1304909} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{10652417} = PI(47, 10, 46, 10, 1, 0)_{56923} \\ \ell_{3111} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{12252289} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{10652417} = PI(47, 10, 46, 10, 1, 0)_{56923} \\ \ell_{3112} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{30393077} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{30623419} = PI(47, 10, 58, 10, 1, 0)_{56922} \\ \ell_{3115} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{30323329} = \begin{bmatrix} 1 & 0 & 0 &$$

$$\begin{split} \ell_{3118} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{56} \end{bmatrix}_{14649281} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{14649281} = \mathbf{PI}(47,10,35,10,1,0)_{58263} \\ \ell_{3119} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{14115585} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{14115585} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{14515855} = \mathbf{PI}(47,10,41,10,1,0)_{58011} \\ \ell_{3120} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{4530369} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{14530369} = \mathbf{PI}(47,10,31,10,1,0)_{58011} \\ \ell_{3122} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{2663105} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{2663105} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{2663105} = \mathbf{PI}(47,10,1,10,1,0)_{56121} \\ \ell_{3123} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{356641} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{3789377} = \mathbf{PI}(47,10,5,10,1,0)_{56373} \\ \ell_{3124} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{6} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{8789377} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{38258241} = \mathbf{PI}(47,10,17,10,1,0)_{57129} \\ \ell_{3126} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{15712513} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{15712513} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11452353} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11452353} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11452353} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11452353} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11452353} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11855145} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11452353} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{11852785} = \mathbf{PI}(47,10,57,10,1,0)_{58934} \\ \ell_{3130} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11452353} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{11852785} = \mathbf{PI}(47,10,52,10,1,0)_{58944} \\ \ell_{3131} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{114914625} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{14914625} = \mathbf{PI}(47,10,52,10,1,0)_{58944} \\ \ell_{3132} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{13914625} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{13958025} = \mathbf{PI}(47,10,22,10,1,0)_{58944} \\ \ell_{$$

$$\begin{split} \ell_{3139} &= \begin{bmatrix} 1 & \epsilon & \epsilon & 0 \\ 0 & 0 & 1 \end{bmatrix}_{545090} = \begin{bmatrix} 1 & 2 & 2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{545090} = \mathbf{Pl}(0,2,0,2,1,0)_{12545} \\ \ell_{3140} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^6 \\ 0 & 1 & 1 & \epsilon^5 \end{bmatrix}_{8790081} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{8790081} = \mathbf{Pl}(48,2,3,2,1,0)_{24496} \\ \ell_{3141} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^6 \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{269377} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{12784129} = \mathbf{Pl}(48,2,2,2,1,0)_{24433} \\ \ell_{3142} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{12784129} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{12784129} = \mathbf{Pl}(48,2,4,2,1,0)_{24559} \\ \ell_{3143} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{1378012} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{6392005} = \mathbf{Pl}(48,2,6,2,1,0)_{24685} \\ \ell_{3144} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{6392005} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{16780161} = \mathbf{Pl}(48,2,12,2,1,0)_{24937} \\ \ell_{3146} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{11986113} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{1678013} = \mathbf{Pl}(48,2,12,2,1,0)_{25063} \\ \ell_{3147} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{11986113} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{1396033} = \mathbf{Pl}(48,2,12,2,1,0)_{25189} \\ \ell_{3149} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{7194113} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{7194113} = \mathbf{Pl}(48,2,12,2,1,0)_{25693} \\ \ell_{3152} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{7194113} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{12518785} = \mathbf{Pl}(48,2,22,2,1,0)_{25693} \\ \ell_{3152} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{2130689} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{203089} = \mathbf{Pl}(48,2,28,2,1,0)_{25693} \\ \ell_{3154} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{36924737} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{36924737} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{36924737} = \mathbf{Pl}(48,2,28,2,1,0)_{26931} \\ \ell_{3154} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{36924737} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 1 & 58 \end{bmatrix}_{3596097} = \mathbf{Pl}(48,2,28,2,1,0)_{26932} \\ \ell_{3155} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{31718785} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 &$$

$$\begin{split} \ell_{3160} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^8 \\ 0 & 1 & 1 & \epsilon^7 \end{bmatrix}_{10388097} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{10388097} = \mathbf{PI}(48, 2, 40, 2, 1, 0)_{26827} \\ \ell_{3161} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{3098081} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{3098081} = \mathbf{PI}(48, 2, 42, 2, 1, 0)_{26953} \\ \ell_{3162} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{9055425} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{10920769} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{10920769} = \mathbf{PI}(48, 2, 44, 2, 1, 0)_{27205} \\ \ell_{3163} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{16512833} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{16512833} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{16512833} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{16512833} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{16512833} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{2400065} = \mathbf{PI}(48, 2, 50, 2, 1, 0)_{27457} \\ \ell_{3165} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{2400065} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{2400065} = \mathbf{PI}(48, 2, 50, 2, 1, 0)_{27533} \\ \ell_{3168} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{5663425} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{5063425} = \mathbf{PI}(48, 2, 50, 2, 1, 0)_{27835} \\ \ell_{3170} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{15480161} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{15480161} = \mathbf{PI}(48, 2, 50, 2, 1, 0)_{28087} \\ \ell_{3171} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{13316801} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{153168016} = \mathbf{PI}(48, 2, 50, 2, 1, 0)_{28087} \\ \ell_{3173} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13316801} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13316801} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13316801} = \mathbf{PI}(48, 2, 33, 2, 1, 0)_{26386} \\ \ell_{3174} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13251457} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{13251457} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{12251457} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 2 & 2 \end{bmatrix}_{1053341} = \mathbf{PI}(48, 2, 43, 2, 1, 0)_{26388} \\ \ell_{3175} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{2232737} = \begin{bmatrix} 1 &$$

$$\begin{split} \ell_{3181} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{6128769} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{6128769} = \mathbf{PI}(48, 2, 51, 2, 1, 0)_{27520} \\ \ell_{3182} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{14649473} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{14649473} = \mathbf{PI}(48, 2, 53, 2, 1, 0)_{27646} \\ \ell_{3183} &= \begin{bmatrix} 1 & 0 & 0 & e^{17} \\ 0 & 1 & 1 & e^{16} \end{bmatrix}_{14116801} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & e^{16} \end{bmatrix}_{14116801} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{14116801} = \mathbf{PI}(48, 2, 55, 2, 1, 0)_{2772} \\ \ell_{3184} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{4530753} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{4530783} = \mathbf{PI}(48, 2, 57, 2, 1, 0)_{27898} \\ \ell_{3185} &= \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{1867393} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{9588097} = \mathbf{PI}(48, 2, 59, 2, 1, 0)_{28276} \\ \ell_{3187} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{2663361} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{332673} = \mathbf{PI}(48, 2, 1, 2, 1, 0)_{24370} \\ \ell_{3189} &= \begin{bmatrix} 1 & 0 & 0 & e^{14} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{8259457} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{8259457} = \mathbf{PI}(48, 2, 1, 2, 1, 0)_{24748} \\ \ell_{3191} &= \begin{bmatrix} 1 & 0 & 0 & e^{22} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14382145} = \mathbf{PI}(48, 2, 1, 2, 1, 0)_{24622} \\ \ell_{3192} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14382145} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14382145} = \mathbf{PI}(48, 2, 1, 2, 1, 0)_{24748} \\ \ell_{3192} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14382145} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14382145} = \mathbf{PI}(48, 2, 1, 2, 1, 0)_{24524} \\ \ell_{3193} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{14382145} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{14383441} = \mathbf{PI}(48, 2, 1, 2, 1, 0)_{24524} \\ \ell_{3193} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{13183441} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{1185113} = \mathbf{PI}(48, 2, 1, 2, 1, 0)_{25524} \\ \ell_{3194} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{14914817} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{14914817} = \mathbf{PI}(48, 2, 1, 2, 1, 0)_{25594} \\ \ell_{3195} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 &$$

$$\ell_{3202} = \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{1334721} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{1334721} = \mathbf{PI}(48, 2, 31, 2, 1, 0)_{26260}$$

$$\ell_{3203} = \begin{bmatrix} 1 & e^6 & e^6 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8929505} = \begin{bmatrix} 1 & 33 & 33 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8929505} = \mathbf{PI}(0, 33, 0, 33, 1, 0)_{149363}$$

$$\ell_{3204} = \begin{bmatrix} 1 & 0 & 0 & e^6 \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{532801} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{532801} = \mathbf{PI}(49, 33, 32, 33, 1, 0)_{149363}$$

$$\ell_{3205} = \begin{bmatrix} 1 & 0 & 0 & e^5 \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{12785153} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{12785153} = \mathbf{PI}(49, 33, 33, 33, 1, 0)_{149552}$$

$$\ell_{3207} = \begin{bmatrix} 1 & 0 & 0 & e^5 \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{13785153} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{12785153} = \mathbf{PI}(49, 33, 32, 33, 1, 0)_{149552}$$

$$\ell_{3208} = \begin{bmatrix} 1 & 0 & 0 & e^5 \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{6392577} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{6392577} = \mathbf{PI}(49, 33, 39, 33, 1, 0)_{147725}$$

$$\ell_{3209} = \begin{bmatrix} 1 & 0 & 0 & e^{51} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{16778177} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{4262401} = \mathbf{PI}(49, 33, 43, 33, 1, 0)_{147725}$$

$$\ell_{3211} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{16778177} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{4262401} = \mathbf{PI}(49, 33, 43, 3, 1, 0)_{147725}$$

$$\ell_{3212} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{31984385} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{3196289} = \mathbf{PI}(49, 33, 47, 33, 1, 0)_{149678}$$

$$\ell_{3213} = \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{31926411} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{3196289} = \mathbf{PI}(49, 33, 47, 33, 1, 0)_{149678}$$

$$\ell_{3214} = \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{31926411} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{12516801} = \mathbf{PI}(49, 33, 45, 33, 1, 0)_{149502}$$

$$\ell_{3214} = \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{31926411} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{12516801} = \mathbf{PI}(49, 33, 45, 33, 1, 0)_{149678}$$

$$\ell_{3215} = \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{9853697} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{9853697} = \mathbf{PI}(49, 33, 45, 33, 1, 0)_{149678}$$

$$\ell_{3217} = \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0$$

$$\ell_{3223} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{7457665} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{7457665} = \mathbf{Pl}(49, 33, 61, 33, 1, 0)_{151190}$$

$$\ell_{3224} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{8} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{10386113} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{10386113} = \mathbf{Pl}(49, 33, 24, 33, 1, 0)_{148859}$$

$$\ell_{3225} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{3998145} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{3998145} = \mathbf{Pl}(49, 33, 57, 33, 1, 0)_{150938}$$

$$\ell_{3226} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{44} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{9057601} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{9057601} = \mathbf{Pl}(49, 33, 59, 33, 1, 0)_{151064}$$

$$\ell_{3227} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{10919297} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{10919297} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{10919297} = \mathbf{Pl}(49, 33, 26, 33, 1, 0)_{148985}$$

$$\ell_{3228} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{16512961} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{1065601} = \mathbf{Pl}(49, 33, 49, 33, 1, 0)_{148355}$$

$$\ell_{3239} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{34657296} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{34657296} = \mathbf{Pl}(49, 33, 51, 33, 1, 0)_{150434}$$

$$\ell_{3230} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{34657296} = \begin{bmatrix} 1 & 0 & 0 & 91 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{2400641} = \mathbf{Pl}(49, 33, 51, 33, 1, 0)_{150860}$$

$$\ell_{3231} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{15980417} = \begin{bmatrix} 1 & 0 & 0 & 91 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{15980417} = \mathbf{Pl}(49, 33, 55, 33, 1, 0)_{148733}$$

$$\ell_{3234} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{15980417} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{15980417} = \mathbf{Pl}(49, 33, 57, 33, 1, 0)_{148007}$$

$$\ell_{3235} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{15980417} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{15980417} = \mathbf{Pl}(49, 33, 57, 33, 1, 0)_{148007}$$

$$\ell_{3236} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{13050497} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{13050497} = \mathbf{Pl}(49, 33, 27, 33, 1, 0)_{149300}$$

$$\ell_{3237} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{5800455} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{109$$

$$\ell_{3244} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^7 \\ 0 & 1 & 1 & \epsilon \end{bmatrix}_{0320769} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{0320769} = \mathbf{PI}(49, 33, 48, 33, 1, 0)_{150371}$$

$$\ell_{3245} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{14648513} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1612809} = \mathbf{PI}(49, 33, 17, 33, 1, 0)_{148148}$$

$$\ell_{3246} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{14648513} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1416957} = \mathbf{PI}(49, 33, 19, 33, 1, 0)_{148544}$$

$$\ell_{3247} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{14116997} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{14116997} = \mathbf{PI}(49, 33, 50, 33, 1, 0)_{150497}$$

$$\ell_{3248} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{1867457} = \begin{bmatrix} 1 & 0 & 0 & 77 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{1867457} = \mathbf{PI}(49, 33, 54, 33, 1, 0)_{150749}$$

$$\ell_{3250} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{36} \end{bmatrix}_{9590401} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & \epsilon^{36} \end{bmatrix}_{9590401} = \mathbf{PI}(49, 33, 52, 33, 1, 0)_{148670}$$

$$\ell_{3252} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{36} \end{bmatrix}_{878097} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{8788097} = \mathbf{PI}(49, 33, 21, 33, 1, 0)_{147410}$$

$$\ell_{3254} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{15713345} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{14383297} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{14383297} = \mathbf{PI}(49, 33, 33, 3, 1, 0)_{147788}$$

$$\ell_{3255} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{15713345} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{14383297} = \mathbf{PI}(49, 33, 33, 3, 1, 0)_{14710}$$

$$\ell_{3254} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{14383297} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{14383297} = \mathbf{PI}(49, 33, 33, 3, 1, 0)_{147788}$$

$$\ell_{3256} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{14383297} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{14383297} = \mathbf{PI}(49, 33, 34, 33, 1, 0)_{147788}$$

$$\ell_{3256} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{1415199} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{14383297} = \mathbf{PI}(49, 33, 36, 33, 1, 0)_{147788}$$

$$\ell_{3256} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{14915329} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{14915329}$$

$$\begin{split} \ell_{3265} &= \begin{bmatrix} 1 & 0 & 0 & e^{51} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{6659669} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{6659699} = \mathbf{Pl}(49, 33, 11, 33, 1, 0)_{148040} \\ \ell_{3266} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{1335041} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{1335041} = \mathbf{Pl}(49, 33, 42, 33, 1, 0)_{149993} \\ \ell_{3267} &= \begin{bmatrix} 1 & e^{11} & e^{11} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8388575} = \begin{bmatrix} 1 & 31 & 31 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8388575} = \mathbf{Pl}(0, 31, 0, 31, 1, 0)_{16257} \\ \ell_{5268} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{15715649} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{15715649} = \mathbf{Pl}(50, 31, 30, 31, 1, 0)_{141360} \\ \ell_{3269} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{22784193} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{12284193} = \mathbf{Pl}(50, 31, 62, 31, 1, 0)_{143316} \\ \ell_{3271} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{12784193} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{12784193} = \mathbf{Pl}(50, 31, 62, 31, 1, 0)_{143316} \\ \ell_{3272} &= \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{16780225} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{8524865} = \mathbf{Pl}(50, 31, 29, 31, 1, 0)_{141393} \\ \ell_{3273} &= \begin{bmatrix} 1 & 0 & 0 & e^{10} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{16780225} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{16780225} = \mathbf{Pl}(50, 31, 2, 31, 1, 0)_{143536} \\ \ell_{3274} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{11985537} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{11985537} = \mathbf{Pl}(50, 31, 35, 31, 1, 0)_{143190} \\ \ell_{3275} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{11985537} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{11985337} = \mathbf{Pl}(50, 31, 37, 31, 1, 0)_{143190} \\ \ell_{3278} &= \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{11985537} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1198537} = \mathbf{Pl}(50, 31, 37, 31, 1, 0)_{143190} \\ \ell_{3277} &= \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{19853825} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{12517825} = \mathbf{Pl}(50, 31, 37, 31, 1, 0)_{141807} \\ \ell_{3280} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{19853825} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{283325} = \mathbf{Pl}(50, 31, 37, 31, 1, 0)_{141807} \\ \ell_{3281} &=$$

$$\ell_{3286} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{16247937} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{16247937} = \mathbf{PI}(50, 31, 43, 31, 1, 0)_{142119}$$

$$\ell_{3287} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{81} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{7459969} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{7459969} = \mathbf{PI}(50, 31, 52, 31, 1, 0)_{142686}$$

$$\ell_{3288} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{8} \\ 0 & 1 & 1 & \epsilon^{60} \end{bmatrix}_{10386625} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{10386625} = \mathbf{PI}(50, 31, 8, 31, 1, 0)_{139914}$$

$$\ell_{3289} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{3997185} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{3997185} = \mathbf{PI}(50, 31, 23, 31, 1, 0)_{140859}$$

$$\ell_{3290} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{10919937} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{10919937} = \mathbf{PI}(50, 31, 41, 31, 1, 0)_{141933}$$

$$\ell_{3292} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1065877} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1065877} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{10619937} = \mathbf{PI}(50, 31, 48, 31, 1, 0)_{142371}$$

$$\ell_{3293} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{1065877} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{16510977} = \mathbf{PI}(50, 31, 48, 31, 1, 0)_{142434}$$

$$\ell_{3294} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{13464769} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{3464769} = \mathbf{PI}(50, 31, 14, 31, 1, 0)_{140481}$$

$$\ell_{3295} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1597669} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{5061761} = \mathbf{PI}(50, 31, 14, 31, 1, 0)_{140292}$$

$$\ell_{3296} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{1597669} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{15978699} = \mathbf{PI}(50, 31, 14, 31, 1, 0)_{142245}$$

$$\ell_{3299} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{13316993} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{13316993} = \mathbf{PI}(50, 31, 12, 31, 1, 0)_{142266}$$

$$\ell_{3300} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{13316993} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{13316993} = \mathbf{PI}(50, 31, 12, 31, 1, 0)_{142667}$$

$$\ell_{3301} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{13051649} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{13051$$

$$\begin{split} \ell_{3307} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{5328257} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{5328257} = \mathbf{PI}(50, 31, 22, 31, 1, 0)_{140796} \\ \ell_{3308} &= \begin{bmatrix} 1 & 0 & 0 & e^{76} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{9321025} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{6126337} = \mathbf{PI}(50, 31, 16, 31, 1, 0)_{14018} \\ \ell_{3309} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{6126337} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{6126337} = \mathbf{PI}(50, 31, 15, 31, 1, 0)_{14055} \\ \ell_{3310} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{14169025} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{14649025} = \mathbf{PI}(50, 31, 46, 31, 1, 0)_{142308} \\ \ell_{3311} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{1416225} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{4238833} = \mathbf{PI}(50, 31, 49, 31, 1, 0)_{140229} \\ \ell_{3313} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{1868033} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{4238833} = \mathbf{PI}(50, 31, 13, 31, 1, 0)_{140249} \\ \ell_{3314} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{2664129} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1888033} = \mathbf{PI}(50, 31, 51, 31, 1, 0)_{142262} \\ \ell_{3315} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{2664129} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{2664129} = \mathbf{PI}(50, 31, 44, 31, 1, 0)_{142182} \\ \ell_{3316} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{332929} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{8255489} = \mathbf{PI}(50, 31, 32, 31, 1, 0)_{14326} \\ \ell_{3319} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{14381825} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{8255489} = \mathbf{PI}(50, 31, 61, 31, 1, 0)_{14325} \\ \ell_{3320} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{11452225} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{13849025} = \mathbf{PI}(50, 31, 61, 31, 1, 0)_{14325} \\ \ell_{3322} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{11456225} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{11452225} = \mathbf{PI}(50, 31, 63, 31, 1, 0)_{14325} \\ \ell_{3323} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{55} \end{bmatrix}_{11456225} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{13849025} = \mathbf{PI}(50, 31, 5, 31, 1, 0)_{14325} \\ \ell_{3324} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\$$

$$\ell_{3328} = \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{4796353} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{4796353} = \mathbf{PI}(50, 31, 7, 31, 1, 0)_{139851}$$

$$\ell_{3329} = \begin{bmatrix} 1 & 0 & 0 & e^{51} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{6658497} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{6658497} = \mathbf{PI}(50, 31, 38, 31, 1, 0)_{141804}$$

$$\ell_{3330} = \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{1335105} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{1335105} = \mathbf{PI}(50, 31, 57, 31, 1, 0)_{143001}$$

$$\ell_{3331} = \begin{bmatrix} 1 & e^{25} & e^{25} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15961595} = \begin{bmatrix} 1 & 59 & 59 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15961595} = \mathbf{PI}(51, 59, 58, 59, 1, 0)_{19841}$$

$$\ell_{3332} = \begin{bmatrix} 1 & 0 & 0 & e^{11} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{265696} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{2695699} = \mathbf{PI}(51, 59, 58, 59, 1, 0)_{254209}$$

$$\ell_{3333} = \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{12785217} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{12785217} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{12785217} = \mathbf{PI}(51, 59, 59, 59, 1, 0)_{254209}$$

$$\ell_{3333} = \begin{bmatrix} 1 & 0 & 0 & e^{62} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{385601} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{6333601} = \mathbf{PI}(51, 59, 44, 59, 1, 0)_{253315}$$

$$\ell_{3336} = \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{36} \end{bmatrix}_{6333601} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & e^{36} \end{bmatrix}_{6333601} = \mathbf{PI}(51, 59, 59, 59, 1, 0)_{254434}$$

$$\ell_{3339} = \begin{bmatrix} 1 & 0 & 0 & e^{61} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{4264449} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{4264449} = \mathbf{PI}(51, 59, 27, 59, 1, 0)_{254344}$$

$$\ell_{3339} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{11986753} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{11986753} = \mathbf{PI}(51, 59, 6, 59, 1, 0)_{254366}$$

$$\ell_{3341} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{7191233} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{7191233} = \mathbf{PI}(51, 59, 45, 9, 1, 0)_{250606}$$

$$\ell_{3341} = \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{7191233} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{7191233} = \mathbf{PI}(51, 59, 6, 59, 1, 0)_{250436}$$

$$\ell_{3342} = \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{7191233} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{7191233} = \mathbf{PI}(5$$

$$\ell_{3349} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{11717569} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{11717569} = PI(51, 59, 32, 59, 1, 0)_{252559}$$

$$\ell_{3350} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{16245057} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{7459201} = PI(51, 59, 12, 59, 1, 0)_{254008}$$

$$\ell_{3351} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{7459201} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{7459201} = PI(51, 59, 55, 59, 1, 0)_{254008}$$

$$\ell_{3352} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{10388609} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{10388609} = PI(51, 59, 53, 59, 1, 0)_{253822}$$

$$\ell_{3353} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{9055745} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{9055745} = PI(51, 59, 34, 59, 1, 0)_{252685}$$

$$\ell_{3354} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{37} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{9055745} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{9055745} = PI(51, 59, 38, 59, 1, 0)_{252433} = PI(51, 59, 38, 59, 1, 0)_{252370}$$

$$\ell_{3356} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{10922433} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{1066113} = PI(51, 59, 38, 59, 1, 0)_{252370}$$

$$\ell_{3357} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{16514689} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{16514689} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{16514689} = PI(51, 59, 8, 59, 1, 0)_{252370}$$

$$\ell_{3359} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{2399745} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{2399745} = PI(51, 59, 8, 59, 1, 0)_{252496}$$

$$\ell_{3360} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{15348833} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{5060545} = PI(51, 59, 31, 59, 1, 0)_{253496}$$

$$\ell_{3361} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{15448833} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{5080545} = PI(51, 59, 31, 59, 1, 0)_{253496}$$

$$\ell_{3362} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{15982017} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{15448833} = PI(51, 59, 31, 59, 1, 0)_{253496}$$

$$\ell_{3363} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{12} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{1348833} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{13950$$

$$\begin{split} \ell_{3391} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{7724417} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{7724417} = \mathbf{Pl}(51, 59, 62, 59, 1, 0)_{254449} \\ \ell_{3392} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{4797505} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{4797505} = \mathbf{Pl}(51, 59, 5, 59, 1, 0)_{250858} \\ \ell_{3393} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{63} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{6659073} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{6659073} = \mathbf{Pl}(51, 59, 41, 59, 1, 0)_{253126} \\ \ell_{3394} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{83} \\ 0 & 0 & 1 & 1 \end{bmatrix}_{13609270} = \begin{bmatrix} 1 & 54 & 54 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14609270} = \mathbf{Pl}(0, 54, 0, 54, 1, 0)_{19201} \\ \ell_{3396} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{11453761} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{11453761} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{12784257} = \mathbf{Pl}(52, 54, 55, 54, 1, 0)_{234164} \\ \ell_{3398} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{12784257} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{12784257} = \mathbf{Pl}(52, 54, 55, 54, 1, 0)_{23416} \\ \ell_{3399} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3696633} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{32784257} = \mathbf{Pl}(52, 54, 55, 54, 1, 0)_{234416} \\ \ell_{3400} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{36392129} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{3524993} = \mathbf{Pl}(52, 54, 59, 54, 1, 0)_{234416} \\ \ell_{3401} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{36392129} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{36392129} = \mathbf{Pl}(52, 54, 26, 54, 1, 0)_{233471} \\ \ell_{3402} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{1678241} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{17678241} = \mathbf{Pl}(52, 54, 23, 54, 1, 0)_{233471} \\ \ell_{3403} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{11986817} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{11986817} = \mathbf{Pl}(52, 54, 54, 54, 1, 0)_{233278} \\ \ell_{3404} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{193281} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{1932817} = \mathbf{Pl}(52, 54, 54, 54, 1, 0)_{233277} \\ \ell_{3405} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{193281} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{1932817} = \mathbf{Pl}(52, 5$$

$$\ell_{3412} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{1599533} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{1599533} = \mathbf{PI}(52, 54, 9, 54, 1, 0)_{231266}$$

$$\ell_{3413} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{11717697} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{11717697} = \mathbf{PI}(52, 54, 63, 54, 1, 0)_{230951}$$

$$\ell_{3414} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{16246081} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{16246081} = \mathbf{PI}(52, 54, 45, 1, 0)_{230951}$$

$$\ell_{3415} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{7458497} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{7458497} = \mathbf{PI}(52, 54, 50, 54, 1, 0)_{233849}$$

$$\ell_{3416} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{10387649} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{10387649} = \mathbf{PI}(52, 54, 37, 54, 1, 0)_{233630}$$

$$\ell_{3418} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{3995205} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{3995265} = \mathbf{PI}(52, 54, 37, 54, 1, 0)_{233630}$$

$$\ell_{3419} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{39958049} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{10920705} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{10920705} = \mathbf{PI}(52, 54, 40, 54, 1, 0)_{233219}$$

$$\ell_{3420} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{16513217} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{1063699} = \mathbf{PI}(52, 54, 61, 54, 1, 0)_{231524}$$

$$\ell_{3422} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{3462081} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{3402081} = \mathbf{PI}(52, 54, 65, 41, 1, 0)_{231527}$$

$$\ell_{3423} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{3462081} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{2397761} = \mathbf{PI}(52, 54, 65, 41, 1, 0)_{231577}$$

$$\ell_{3424} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1549153} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{13316417} = \mathbf{PI}(52, 54, 28, 54, 1, 0)_{233452}$$

$$\ell_{3425} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1549153} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{13316417} = \mathbf{PI}(52, 54, 36, 54, 1, 0)_{233452}$$

$$\ell_{3426} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{13316417} = \begin{bmatrix} 1 & 0 & 0 & 65 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{13316417}$$

$$\ell_{3433} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{51} \end{bmatrix}_{2930045} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{2930945} = \mathbf{PI}(52, 54, 62, 54, 1, 0)_{234605}$$

$$\ell_{3434} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3732289} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{3732289} = \mathbf{PI}(52, 54, 5, 54, 1, 0)_{231014}$$

$$\ell_{3435} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{65} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{5329857} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{5329857} = \mathbf{PI}(52, 54, 51, 54, 1, 0)_{233912}$$

$$\ell_{3436} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{67} \\ 0 & 1 & 1 & \epsilon^{69} \end{bmatrix}_{0321537} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{0321537} = \mathbf{PI}(52, 54, 38, 54, 1, 0)_{233093}$$

$$\ell_{3438} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{14650113} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{14050113} = \mathbf{PI}(52, 54, 43, 54, 1, 0)_{233408}$$

$$\ell_{3439} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{14650113} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{14117963} = \mathbf{PI}(52, 54, 43, 54, 1, 0)_{233426}$$

$$\ell_{3440} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{4520025} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1487137} = \mathbf{PI}(52, 54, 49, 54, 1, 0)_{233129}$$

$$\ell_{3441} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{39} \\ 0 & 1 & 1 & \epsilon^{9} \end{bmatrix}_{1867137} = \begin{bmatrix} 1 & 0 & 0 & 77 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{1867137} = \mathbf{PI}(52, 54, 7, 54, 1, 0)_{233129}$$

$$\ell_{3442} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{2065921} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2665921} = \mathbf{PI}(52, 54, 29, 54, 1, 0)_{233140}$$

$$\ell_{3444} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{54} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{2065921} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2665921} = \mathbf{PI}(52, 54, 27, 54, 1, 0)_{233234}$$

$$\ell_{3445} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{333185} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{1330481} = \mathbf{PI}(52, 54, 27, 54, 1, 0)_{232308}$$

$$\ell_{3446} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{3878481} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{1330481} = \mathbf{PI}(52, 54, 27, 54, 1, 0)_{2323334}$$

$$\ell_{3446} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{1384321} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14380481} = \mathbf{PI}(52, 54, 12, 54, 1, 0)_{232714}$$

$$\ell_{3449} = \begin{bmatrix} 1 &$$

$$\ell_{3454} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{8} \end{bmatrix}_{13584001} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{13584001} = \mathbf{PI}(52, 54, 20, 54, 1, 0)_{231959}$$

$$\ell_{3455} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{7725569} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{7725569} = \mathbf{PI}(52, 54, 53, 54, 1, 0)_{23038}$$

$$\ell_{3456} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{4795521} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{4795521} = \mathbf{PI}(52, 54, 3, 54, 1, 0)_{230888}$$

$$\ell_{3457} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{6661249} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{6661249} = \mathbf{PI}(52, 54, 56, 54, 1, 0)_{234227}$$

$$\ell_{3458} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{1333953} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{1333953} = \mathbf{PI}(52, 54, 14, 54, 1, 0)_{231581}$$

$$\ell_{3469} = \begin{bmatrix} 1 & \epsilon^{46} & \epsilon^{46} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11634155} = \begin{bmatrix} 1 & 43 & 43 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11634155} = \mathbf{PI}(0, 43, 0, 43, 1, 0)_{17793}$$

$$\ell_{3461} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{269697} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{269697} = \mathbf{PI}(53, 43, 43, 43, 43, 1, 0)_{189687}$$

$$\ell_{3462} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{12785281} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{12785281} = \mathbf{PI}(53, 43, 55, 43, 1, 0)_{189086}$$

$$\ell_{3463} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{12785097} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 2^{15} \end{bmatrix}_{6392641} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 2^{15} \end{bmatrix}_{6392641} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{1678097} = \mathbf{PI}(53, 43, 36, 43, 1, 0)_{187986}$$

$$\ell_{3465} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{1678097} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{16982641} = \mathbf{PI}(53, 43, 36, 43, 1, 0)_{189399}$$

$$\ell_{3467} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{11985473} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{18982743} = \mathbf{PI}(53, 43, 36, 43, 1, 0)_{189399}$$

$$\ell_{3468} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{11985473} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{11985473} = \mathbf{PI}(53, 43, 30, 43, 1, 0)_{189389}$$

$$\ell_{3479} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{119936$$

$$\ell_{3475} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{22} \end{bmatrix}_{5504049} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{3594049} = \mathbf{PI}(53, 43, 13, 43, 1, 0)_{187800}$$

$$\ell_{3476} = \begin{bmatrix} 1 & 0 & 0 & e^{59} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{1599681} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1599681} = \mathbf{PI}(53, 43, 60, 43, 1, 0)_{198410}$$

$$\ell_{3477} = \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{37} \end{bmatrix}_{11720001} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{11720001} = \mathbf{PI}(53, 43, 23, 43, 1, 0)_{188490}$$

$$\ell_{3478} = \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{10226913} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{16246913} = \mathbf{PI}(53, 43, 11, 43, 1, 0)_{187734}$$

$$\ell_{3489} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{58} \end{bmatrix}_{7456705} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{10389633} = \mathbf{PI}(53, 43, 32, 43, 1, 0)_{189057}$$

$$\ell_{3481} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{10389633} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3994817} = \mathbf{PI}(53, 43, 24, 43, 1, 0)_{187293}$$

$$\ell_{3482} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{61} \end{bmatrix}_{9055873} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{9055873} = \mathbf{PI}(53, 43, 44, 43, 1, 0)_{187293}$$

$$\ell_{3483} = \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{54} \end{bmatrix}_{10919105} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{10919105} = \mathbf{PI}(53, 43, 44, 43, 1, 0)_{187608}$$

$$\ell_{3484} = \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{1066025} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{16612577} = \mathbf{PI}(53, 43, 44, 43, 1, 0)_{188043}$$

$$\ell_{3485} = \begin{bmatrix} 1 & 0 & 0 & e^{12} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{16512577} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{16612577} = \mathbf{PI}(53, 43, 44, 43, 1, 0)_{188044}$$

$$\ell_{3487} = \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{16512577} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{16612577} = \mathbf{PI}(53, 43, 45, 43, 1, 0)_{188044}$$

$$\ell_{3488} = \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{2398337} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{3462913} = \mathbf{PI}(53, 43, 45, 43, 1, 0)_{188044}$$

$$\ell_{3489} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{15464665} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1546665} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{13050881}$$

$$\begin{split} \ell_{3496} &= \begin{bmatrix} 1 & 0 & 0 & e^{27} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{12252161} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{12252161} = PI(53, 43, 22, 43, 1, 0)_{188427} \\ \ell_{3497} &= \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{3731393} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{38930497} = PI(53, 43, 61, 43, 1, 0)_{19984} \\ \ell_{3498} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{3731393} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{3731393} = PI(53, 43, 33, 43, 1, 0)_{189120} \\ \ell_{3499} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{5329089} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{5329089} = PI(53, 43, 10, 43, 1, 0)_{187671} \\ \ell_{3500} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{3232321} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{9323521} = PI(53, 43, 7, 43, 1, 0)_{187422} \\ \ell_{3501} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{6126981} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{6126981} = PI(53, 43, 44, 43, 1, 0)_{189813} \\ \ell_{3502} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{14146899} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{14646849} = PI(53, 43, 27, 43, 1, 0)_{188742} \\ \ell_{3503} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{4527937} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{4527937} = PI(53, 43, 8, 43, 1, 0)_{189246} \\ \ell_{3505} &= \begin{bmatrix} 1 & 0 & 0 & e^{39} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{5857265} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{9587265} = PI(53, 43, 35, 43, 1, 0)_{189301} \\ \ell_{3506} &= \begin{bmatrix} 1 & 0 & 0 & e^{59} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{8790465} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{533313} = PI(53, 43, 37, 43, 1, 0)_{189302} \\ \ell_{3509} &= \begin{bmatrix} 1 & 0 & 0 & e^{59} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{8790465} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{8790465} = PI(53, 43, 37, 43, 1, 0)_{189302} \\ \ell_{3511} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{13851649} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{11451137} = PI(53, 43, 14, 43, 1, 0)_{189302} \\ \ell_{3512} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{29} \end{bmatrix}_{13851649} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{11451137} = PI(53, 43, 14, 43, 1, 0)_{189302} \\ \ell_{3514} &= \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{11850699} =$$

$$\begin{split} \ell_{3517} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{7989633} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{7989633} = \mathbf{PI}(53, 43, 12, 43, 1, 0)_{187797} \\ \ell_{3518} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{13582785} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{13582785} = \mathbf{PI}(53, 43, 39, 43, 1, 0)_{189498} \\ \ell_{3519} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{7726273} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{7736273} = \mathbf{PI}(53, 43, 35, 2, 43, 1, 0)_{190317} \\ \ell_{3520} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{4796673} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{4796673} = \mathbf{PI}(53, 43, 31, 43, 1, 0)_{188944} \\ \ell_{3521} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{7} \end{bmatrix}_{1333761} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{1333761} = \mathbf{PI}(53, 43, 3, 43, 1, 0)_{189501} \\ \ell_{3522} &= \begin{bmatrix} 1 & \epsilon^{33} & \epsilon^{33} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{14068340} = \begin{bmatrix} 1 & 52 & 52 & 0 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{11187521} = \mathbf{PI}(54, 52, 53, 52, 1, 0)_{226102} \\ \ell_{3524} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{30} \end{bmatrix}_{269761} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{269761} = \mathbf{PI}(54, 52, 52, 52, 1, 0)_{226039} \\ \ell_{3525} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{12784321} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{269761} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{8522881} = \mathbf{PI}(54, 52, 52, 52, 1, 0)_{226006} \\ \ell_{3524} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{16778049} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{16778049} = \mathbf{PI}(54, 52, 38, 52, 1, 0)_{226006} \\ \ell_{3525} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{64} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{16778049} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{16778049} = \mathbf{PI}(54, 52, 36, 52, 1, 0)_{226397} \\ \ell_{3529} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{11984321} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{16778049} = \mathbf{PI}(54, 52, 36, 52, 1, 0)_{224404} \\ \ell_{3531} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{11984321} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{11984321} = \mathbf{PI}(54, 52, 52, 52, 1, 0)_{224377} \\ \ell_{3533} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{11984321} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{3198593} = \mathbf{PI}(54,$$

$$\ell_{3538} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{10119873} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{10119873} = \mathbf{PI}(54, 52, 63, 52, 1, 0)_{226732}$$

$$\ell_{3539} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{5594753} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{5594753} = \mathbf{PI}(54, 52, 11, 52, 1, 0)_{225346}$$

$$\ell_{3540} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{90} \\ 0 & 1 & 1 & \epsilon^{26} \end{bmatrix}_{159297} = \begin{bmatrix} 1 & 0 & 0 & 64 \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{11721217} = \begin{bmatrix} 1 & 0 & 0 & 64 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{11721217} = \mathbf{PI}(54, 52, 29, 52, 1, 0)_{224590}$$

$$\ell_{3541} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{11721217} = \begin{bmatrix} 1 & 0 & 0 & 64 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{11721217} = \mathbf{PI}(54, 52, 32, 52, 1, 0)_{224590}$$

$$\ell_{3542} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{16244737} = \begin{bmatrix} 1 & 0 & 0 & 64 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{16244737} = \mathbf{PI}(54, 52, 32, 52, 1, 0)_{224779}$$

$$\ell_{3543} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{48} \end{bmatrix}_{7459009} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{10389121} = \mathbf{PI}(54, 52, 20, 52, 1, 0)_{224923}$$

$$\ell_{3544} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{8} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{3995905} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{3995905} = \mathbf{PI}(54, 52, 59, 52, 1, 0)_{22450}$$

$$\ell_{3545} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{41} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{3995905} = \begin{bmatrix} 1 & 0 & 0 & 34 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{3995905} = \mathbf{PI}(54, 52, 50, 52, 1, 0)_{223708}$$

$$\ell_{3546} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{3965321} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{3965321} = \mathbf{PI}(54, 52, 50, 52, 1, 0)_{223913}$$

$$\ell_{3547} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{1066881} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{10919480} = \mathbf{PI}(54, 52, 50, 52, 1, 0)_{223582}$$

$$\ell_{3549} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{16514433} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{16514433} = \mathbf{PI}(54, 52, 57, 52, 1, 0)_{223582}$$

$$\ell_{3551} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{1651633} = \begin{bmatrix} 1 & 0 & 0 & 62 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{2366865} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{2366865} = \mathbf{PI}(54, 52, 48, 52, 1, 0)_{225777}$$

$$\ell_{3553} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{15447809}$$

$$\ell_{3559} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{10564593} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{10654593} = PI(54, 52, 14, 52, 1, 0)_{223615}$$

$$\ell_{3560} = \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{12253121} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{12253121} = PI(54, 52, 33, 52, 1, 0)_{224842}$$

$$\ell_{3561} = \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{48} \end{bmatrix}_{2930305} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{2930305} = PI(54, 52, 21, 52, 1, 0)_{224086}$$

$$\ell_{3562} = \begin{bmatrix} 1 & 0 & 0 & e^{40} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{3730497} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{3730497} = PI(54, 52, 40, 52, 1, 0)_{225283}$$

$$\ell_{3563} = \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{22} \end{bmatrix}_{5337297} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{5327297} = PI(54, 52, 28, 52, 1, 0)_{224212}$$

$$\ell_{3564} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{3323265} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{3823265} = PI(54, 52, 33, 52, 1, 0)_{224212}$$

$$\ell_{3566} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{14} \end{bmatrix}_{14650433} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{14650433} = PI(54, 52, 30, 52, 1, 0)_{224653}$$

$$\ell_{3567} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{14117633} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{14117633} = PI(54, 52, 42, 52, 1, 0)_{224698}$$

$$\ell_{3569} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{14117633} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{14117633} = PI(54, 52, 42, 52, 1, 0)_{223678}$$

$$\ell_{3569} = \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{353441} = \begin{bmatrix} 1 & 0 & 0 & 75 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{353441} = PI(54, 52, 42, 52, 1, 0)_{223691}$$

$$\ell_{3570} = \begin{bmatrix} 1 & 0 & 0 & e^{36} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{353441} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{353441} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{353441} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{353441} = PI(54, 52, 46, 52, 1, 0)_{223296}$$

$$\ell_{3575} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{32817317} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{333441} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{3354757} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{31733217} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 28$$

$$\ell_{3580} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{9} \end{bmatrix}_{14916033} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{14916033} = \mathbf{PI}(54, 52, 10, 52, 1, 0)_{223393}$$

$$\ell_{3581} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{10} \end{bmatrix}_{7991809} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{7991809} = \mathbf{PI}(54, 52, 55, 52, 1, 0)_{226228}$$

$$\ell_{3582} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{13583553} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{13583553} = \mathbf{PI}(54, 52, 3, 52, 1, 0)_{222922}$$

$$\ell_{3583} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{4793729} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{7723905} = \mathbf{PI}(54, 52, 34, 52, 1, 0)_{222535}$$

$$\ell_{3584} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{4793729} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{4793729} = \mathbf{PI}(54, 52, 24, 52, 1, 0)_{224275}$$

$$\ell_{3585} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{4793729} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{4793729} = \mathbf{PI}(54, 52, 24, 52, 1, 0)_{224275}$$

$$\ell_{3586} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{6658305} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{6658305} = \mathbf{PI}(54, 52, 37, 52, 1, 0)_{225844}$$

$$\ell_{3587} = \begin{bmatrix} 1 & \epsilon^{16} & \epsilon^{16} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11366690} = \begin{bmatrix} 1 & 42 & 42 & 0 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{13851201} = \mathbf{PI}(55, 42, 43, 42, 1, 0)_{185783}$$

$$\ell_{3589} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{266825} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{13851201} = \mathbf{PI}(55, 42, 43, 42, 1, 0)_{185720}$$

$$\ell_{3590} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{12785345} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{12785345} = \mathbf{PI}(55, 42, 43, 42, 1, 0)_{185027}$$

$$\ell_{3593} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{633665} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{6780289} = \mathbf{PI}(55, 42, 33, 42, 1, 0)_{185153}$$

$$\ell_{3593} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{16780289} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{16780289} = \mathbf{PI}(55, 42, 23, 42, 1, 0)_{184344}$$

$$\ell_{3593} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{16780289} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{17980289} = \mathbf{PI}(55, 42, 20, 42, 1, 0)_{184334}$$

$$\ell_{3595} = \begin{bmatrix}$$

$$\begin{split} \ell_{3601} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{6926593} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{6926593} = \mathbf{PI}(55, 42, 55, 42, 1, 0)_{185539} \\ \ell_{3602} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{2} \end{bmatrix}_{10121793} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{10121793} = \mathbf{PI}(55, 42, 40, 42, 1, 0)_{185594} \\ \ell_{3603} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{5596457} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{5595457} = \mathbf{PI}(55, 42, 2, 42, 1, 0)_{183200} \\ \ell_{3604} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{69} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{1598913} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{11718401} = \mathbf{PI}(55, 42, 44, 42, 1, 0)_{183452} \\ \ell_{3606} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{16248513} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{11718401} = \mathbf{PI}(55, 42, 6, 42, 1, 0)_{184452} \\ \ell_{3606} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{16248513} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{16248513} = \mathbf{PI}(55, 42, 25, 42, 1, 0)_{184049} \\ \ell_{3608} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{7460289} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{7460289} = \mathbf{PI}(55, 42, 39, 42, 1, 0)_{185531} \\ \ell_{3609} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{3996225} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{3996225} = \mathbf{PI}(55, 42, 39, 42, 1, 0)_{185933} \\ \ell_{3611} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{3996221} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{3996225} = \mathbf{PI}(55, 42, 13, 42, 1, 0)_{185082} \\ \ell_{3611} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{1067137} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{10922113} = \mathbf{PI}(55, 42, 56, 42, 1, 0)_{186062} \\ \ell_{3613} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{3463297} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{3463297} = \mathbf{PI}(55, 42, 16, 42, 1, 0)_{184082} \\ \ell_{3615} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{3463297} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{3463297} = \mathbf{PI}(55, 42, 40, 42, 1, 0)_{186161} \\ \ell_{3615} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{34} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{3578817} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 & 3 \end{bmatrix}_{3597817} = \mathbf{PI}(55, 42, 40, 42, 1, 0)_{186161} \\ \ell_{3619} &= \begin{bmatrix} 1 & 0$$

$$\ell_{3022} = \begin{bmatrix} 1 & 0 & 0 & e^{49} \\ 0 & 1 & 1 & e^{3} \end{bmatrix}_{5859201} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{5859201} = \mathbf{PI}(55, 42, 12, 42, 1, 0)_{188330}$$

$$\ell_{3623} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{40} \end{bmatrix}_{10653057} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{10653057} = \mathbf{PI}(55, 42, 38, 42, 1, 0)_{186224}$$

$$\ell_{3624} = \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{12251969} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{12251969} = \mathbf{PI}(55, 42, 50, 42, 1, 0)_{186224}$$

$$\ell_{3625} = \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{22} \end{bmatrix}_{2929601} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{2929601} = \mathbf{PI}(55, 42, 24, 42, 1, 0)_{183515}$$

$$\ell_{3626} = \begin{bmatrix} 1 & 0 & 0 & e^{35} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{3731137} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3731137} = \mathbf{PI}(55, 42, 7, 42, 1, 0)_{185909}$$

$$\ell_{3628} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{3721281} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{5326529} = \mathbf{PI}(55, 42, 47, 42, 1, 0)_{186035}$$

$$\ell_{3629} = \begin{bmatrix} 1 & 0 & 0 & e^{26} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{3721281} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 63 \end{bmatrix}_{321281} = \mathbf{PI}(55, 42, 47, 42, 1, 0)_{183389}$$

$$\ell_{3630} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{1414241} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{14647553} = \mathbf{PI}(55, 42, 45, 42, 1, 0)_{183389}$$

$$\ell_{3632} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{14147553} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{14647553} = \mathbf{PI}(55, 42, 36, 42, 1, 0)_{183389}$$

$$\ell_{3633} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{14142411} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{4530113} = \mathbf{PI}(55, 42, 36, 42, 1, 0)_{183342}$$

$$\ell_{3633} = \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{4530113} = \begin{bmatrix} 1 & 0 & 0 & 75 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{4530113} = \mathbf{PI}(55, 42, 36, 42, 1, 0)_{183342}$$

$$\ell_{3634} = \begin{bmatrix} 1 & 0 & 0 & e^{64} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{989761} = \begin{bmatrix} 1 & 0 & 0 & 75 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{9869761} = \mathbf{PI}(55, 42, 14, 42, 1, 0)_{183966}$$

$$\ell_{3636} = \begin{bmatrix} 1 & 0 & 0 & e^{64} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{3806561} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{3806561} = \mathbf{PI}(55, 42, 21, 42, 1, 0)_{184964}$$

$$\ell_{3636} = \begin{bmatrix} 1 & 0$$

$$\begin{split} \ell_{3643} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{5} \end{bmatrix}_{15181377} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{13181377} = \mathbf{PI}(55, 42, 3, 42, 1, 0)_{183263} \\ \ell_{3644} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{191497} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{1491497} = \mathbf{PI}(55, 42, 41, 42, 1, 0)_{18567} \\ \ell_{3646} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{7992449} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{7992449} = \mathbf{PI}(55, 42, 54, 42, 1, 0)_{184838} \\ \ell_{3646} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{22} \end{bmatrix}_{13582721} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{13582721} = \mathbf{PI}(55, 42, 8, 42, 1, 0)_{184838} \\ \ell_{3647} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{36} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{4793881} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{4793881} = \mathbf{PI}(55, 42, 8, 42, 1, 0)_{185216} \\ \ell_{3649} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{1331145} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{6658753} = \mathbf{PI}(55, 42, 42, 42, 1, 0)_{184523} \\ \ell_{3651} &= \begin{bmatrix} 1 & \epsilon^{21} & \epsilon^{21} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15420665} = \begin{bmatrix} 1 & 57 & 57 & 0 \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{13491673} = \mathbf{PI}(56, 57, 57, 57, 1, 0)_{246201} \\ \ell_{3653} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{12784385} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{12784385} = \mathbf{PI}(56, 57, 38, 57, 1, 0)_{246201} \\ \ell_{3654} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{62} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{12784385} = \begin{bmatrix} 1 & 0 & 0 & 32 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{13491673} = \mathbf{PI}(56, 57, 38, 57, 1, 0)_{246201} \\ \ell_{3657} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{12784385} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{12784385} = \mathbf{PI}(56, 57, 38, 57, 1, 0)_{245266} \\ \ell_{3657} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{43} \end{bmatrix}_{3692193} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{3692193} = \mathbf{PI}(56, 57, 38, 57, 1, 0)_{245260} \\ \ell_{3656} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{16780333} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{3693193} = \mathbf{PI}(56, 57, 57, 57, 1, 0)_{245260} \\ \ell_{3659} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{61} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{1694193} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{3693193} = \mathbf{PI}(56, 57, 20, 57, 1, 0)_{245360} \\ \ell_{3669} &= \begin{bmatrix} 1$$

$$\begin{split} \ell_{3664} &= \begin{bmatrix} 1 & 0 & 0 & e^{3} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{2132801} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{2132801} = \mathbf{Pl}(56, 57, 11, 57, 1, 0)_{243303} \\ \ell_{3665} &= \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{11} \end{bmatrix}_{6925889} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 31 \end{bmatrix}_{6925889} = \mathbf{Pl}(56, 57, 50, 57, 1, 0)_{245760} \\ \ell_{3666} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{10119809} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{10119809} = \mathbf{Pl}(56, 57, 24, 57, 1, 0)_{244122} \\ \ell_{3667} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{559521} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{5595521} = \mathbf{Pl}(56, 57, 33, 57, 1, 0)_{24689} \\ \ell_{3669} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{11720449} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{11720449} = \mathbf{Pl}(56, 57, 2, 57, 1, 0)_{242736} \\ \ell_{3670} &= \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{67} \end{bmatrix}_{16246785} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{11720449} = \mathbf{Pl}(56, 57, 2, 57, 1, 0)_{243681} \\ \ell_{3671} &= \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{20} \end{bmatrix}_{7459329} = \begin{bmatrix} 1 & 0 & 0 & 39 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{10389697} = \mathbf{Pl}(56, 57, 29, 57, 1, 0)_{244878} \\ \ell_{3672} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{3997505} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{3997505} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{3997505} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{3997505} = \mathbf{Pl}(56, 57, 59, 57, 1, 0)_{24399} \\ \ell_{3675} &= \begin{bmatrix} 1 & 0 & 0 & e^{37} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{10921153} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{3465985} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{3465985} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{39859999999} = \mathbf{Pl}(56, 57, 25, 57, 1, 0)_{244399} \\ \ell_{3678} &= \begin{bmatrix} 1 & 0 & 0 & e^{31} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{3465985} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{39989999} = \mathbf{Pl}(56, 57, 25, 57, 1, 0)_{245999} \\ \ell_{3679} &= \begin{bmatrix} 1 & 0 & 0 & e^{19} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{3465985} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{39989999} = \mathbf{Pl}(56, 57, 59, 57, 1, 0)_{245999} \\ \ell_{3679} &= \begin{bmatrix} 1 & 0 & 0 & e^{19} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{3465985} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{399899999} = \mathbf{$$

$$\ell_{3685} = \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{13051201} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{13051201} = PI(56, 57, 46, 57, 1, 0)_{242508}$$

$$\ell_{3686} = \begin{bmatrix} 1 & 0 & 0 & e^{19} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{13051201} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{5860225} = PI(56, 57, 4, 57, 1, 0)_{242862}$$

$$\ell_{3687} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{35} \end{bmatrix}_{10653313} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{10653313} = PI(56, 57, 61, 57, 1, 0)_{24653}$$

$$\ell_{3688} = \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{12252097} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{2930113} = PI(56, 57, 49, 57, 1, 0)_{245697}$$

$$\ell_{3689} = \begin{bmatrix} 1 & 0 & 0 & e^{18} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{3729665} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{2930113} = PI(56, 57, 85, 57, 1, 0)_{244752}$$

$$\ell_{3690} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{49} \end{bmatrix}_{3729665} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{3729665} = PI(56, 57, 34, 57, 1, 0)_{244752}$$

$$\ell_{3692} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{49} \end{bmatrix}_{9322561} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & e^{49} \end{bmatrix}_{9322561} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{9322561} = PI(56, 57, 58, 57, 1, 0)_{246264}$$

$$\ell_{3693} = \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{14648193} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{14648193} = PI(56, 57, 41, 57, 1, 0)_{24374}$$

$$\ell_{3695} = \begin{bmatrix} 1 & 0 & 0 & e^{17} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{1414497} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{14648193} = PI(56, 57, 16, 57, 1, 0)_{243618}$$

$$\ell_{3696} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{1414497} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{1864833} = PI(56, 57, 37, 57, 1, 0)_{243374}$$

$$\ell_{3698} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{3688289} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{1864833} = PI(56, 57, 37, 57, 1, 0)_{243374}$$

$$\ell_{3696} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{3688289} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{1864833} = PI(56, 57, 57, 57, 1, 0)_{243375}$$

$$\ell_{3696} = \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{3688289} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{1864833} = PI(56, 57, 57, 57, 1, 0)_{24337$$

$$\begin{split} \ell_{3706} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{12} \end{bmatrix}_{13851777} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{13851777} = \mathbf{P}\mathbf{I}(56, 57, 25, 57, 1, 0)_{244185} \\ \ell_{3707} &= \begin{bmatrix} 1 & 0 & 0 & e^{13} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{1184961} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1184963} = \mathbf{P}\mathbf{I}(56, 57, 32, 57, 1, 0)_{244626} \\ \ell_{3708} &= \begin{bmatrix} 1 & 0 & 0 & e^{21} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{15179393} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{15179393} = \mathbf{P}\mathbf{I}(56, 57, 15, 71, 0)_{242673} \\ \ell_{3709} &= \begin{bmatrix} 1 & 0 & 0 & e^{49} \\ 0 & 1 & 1 & e^{28} \end{bmatrix}_{7993025} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{7993025} = \mathbf{P}\mathbf{I}(56, 57, 18, 57, 1, 0)_{243744} \\ \ell_{3710} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{17} \end{bmatrix}_{13584897} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{13584897} = \mathbf{P}\mathbf{I}(56, 57, 39, 57, 1, 0)_{245047} \\ \ell_{3711} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{7724097} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{7724097} = \mathbf{P}\mathbf{I}(56, 57, 39, 57, 1, 0)_{245067} \\ \ell_{3712} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{1333185} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{6661057} = \mathbf{P}\mathbf{I}(56, 57, 39, 57, 1, 0)_{24586} \\ \ell_{3714} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{32} \end{bmatrix}_{1333185} = \begin{bmatrix} 1 & 0 & 0 & 5 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{6661057} = \mathbf{P}\mathbf{I}(56, 57, 52, 57, 1, 0)_{24586} \\ \ell_{3715} &= \begin{bmatrix} 1 & e^{42} & e^{42} & e^{42} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15150200} = \begin{bmatrix} 1 & 56 & 56 & 0 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{1333185} = \mathbf{P}\mathbf{I}(56, 57, 52, 57, 1, 0)_{245223} \\ \ell_{3716} &= \begin{bmatrix} 1 & 0 & 0 & e^{21} \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{2699053} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{15182913} = \mathbf{P}\mathbf{I}(57, 56, 57, 56, 1, 0)_{242233} \\ \ell_{3719} &= \begin{bmatrix} 1 & 0 & 0 & e^{21} \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{2699053} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{2699053} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{8523201} = \mathbf{P}\mathbf{I}(57, 56, 56, 56, 6, 1, 0)_{241225} \\ \ell_{3720} &= \begin{bmatrix} 1 & 0 & 0 & e^{41} \\ 0 & 1 & 1 & e^{42} \end{bmatrix}_{1389049} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{4264641} = \mathbf{P}\mathbf{I}(57, 56, 34, 56, 1, 0)_{240280} \\ \ell_{3721} &= \begin{bmatrix} 1 & 0 & 0 & e^{41} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{1198049} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0$$

$$\begin{split} \ell_{3727} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{9853761} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{9883761} = \mathbf{PI}(57, 56, 12, 56, 1, 0)_{239398} \\ \ell_{3728} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{52} \end{bmatrix}_{2133313} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{2133313} = \mathbf{PI}(57, 56, 7, 56, 1, 0)_{239083} \\ \ell_{3729} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{6924225} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{6924225} = \mathbf{PI}(57, 56, 63, 56, 1, 0)_{242611} \\ \ell_{5730} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{10121729} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{10121729} = \mathbf{PI}(57, 56, 22, 56, 1, 0)_{240028} \\ \ell_{3731} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{36} \end{bmatrix}_{5594689} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{1601217} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{1601217} = \mathbf{PI}(57, 56, 43, 56, 1, 0)_{241351} \\ \ell_{3733} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{171719169} = \begin{bmatrix} 1 & 0 & 0 & 64 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{171719169} = \mathbf{PI}(57, 56, 58, 56, 1, 0)_{242266} \\ \ell_{3734} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{16246405} = \begin{bmatrix} 1 & 0 & 0 & 68 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{16246405} = \mathbf{PI}(57, 56, 25, 56, 10)_{242266} \\ \ell_{3735} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{7459585} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{7459585} = \mathbf{PI}(57, 56, 25, 56, 1, 0)_{238209} \\ \ell_{3737} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{62} \end{bmatrix}_{3906473} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{3906673} = \mathbf{PI}(57, 56, 24, 56, 1, 0)_{241729} \\ \ell_{3738} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{39064593} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{9054593} = \mathbf{PI}(57, 56, 24, 56, 1, 0)_{2406485} \\ \ell_{3740} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{3906573} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{30918657} = \mathbf{PI}(57, 56, 34, 56, 1, 0)_{2406485} \\ \ell_{3741} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{3465153} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{30918657} = \mathbf{PI}(57, 56, 34, 56, 1, 0)_{2406485} \\ \ell_{3743} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3465163} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{3465163} = \mathbf{PI}(57, 5$$

$$\ell_{3748} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{801601} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{801601} = \mathbf{PI}(57, 56, 55, 56, 1, 0)_{242107}$$

$$\ell_{3749} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{3050241} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{13050241} = \mathbf{PI}(57, 56, 15, 56, 1, 0)_{230587}$$

$$\ell_{3750} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{1055873} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{5839585} = \mathbf{PI}(57, 56, 38, 56, 1, 0)_{241036}$$

$$\ell_{3751} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{56} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{1065873} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{10655873} = \mathbf{PI}(57, 56, 30, 56, 1, 0)_{240532}$$

$$\ell_{3752} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{12250945} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{12250945} = \mathbf{PI}(57, 56, 21, 56, 1, 0)_{23995}$$

$$\ell_{3753} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{2929793} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{2929793} = \mathbf{PI}(57, 56, 45, 56, 1, 0)_{241477}$$

$$\ell_{3754} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{3729793} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{3729793} = \mathbf{PI}(57, 56, 45, 56, 1, 0)_{242422}$$

$$\ell_{3755} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{5327937} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{3324545} = \mathbf{PI}(57, 56, 45, 56, 1, 0)_{239776}$$

$$\ell_{3757} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{6128513} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{14648799} = \mathbf{PI}(57, 56, 35, 56, 1, 0)_{24239}$$

$$\ell_{3758} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{17} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{14618799} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{14117377} = \mathbf{PI}(57, 56, 59, 56, 1, 0)_{24239}$$

$$\ell_{3759} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{14618799} = \begin{bmatrix} 1 & 0 & 0 & 75 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{14618799} = \mathbf{PI}(57, 56, 59, 56, 1, 0)_{24239}$$

$$\ell_{3760} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{14618799} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14117377} = \mathbf{PI}(57, 56, 59, 56, 1, 0)_{24239}$$

$$\ell_{3764} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{29590081} = \begin{bmatrix} 1 & 0 & 0 & 36 \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{29590081} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{2533825} = \mathbf{PI$$

$$\begin{split} \ell_{3769} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{46} \\ 0 & 1 & 1 & \epsilon^{4} \end{bmatrix}_{11452097} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{11452097} = \mathbf{PI}(57, 56, 6, 56, 1, 0)_{230020} \\ \ell_{3770} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{3848449} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{13848449} = \mathbf{PI}(57, 56, 47, 56, 1, 0)_{241003} \\ \ell_{3771} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{11187393} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14913089} = \mathbf{PI}(57, 56, 23, 56, 1, 0)_{240091} \\ \ell_{3772} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14913089} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{14913089} = \mathbf{PI}(57, 56, 1, 56, 1, 0)_{238705} \\ \ell_{3773} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{13581899} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{13381899} = \mathbf{PI}(57, 56, 40, 56, 1, 0)_{241162} \\ \ell_{3774} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{3581899} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{13381899} = \mathbf{PI}(57, 56, 16, 56, 1, 0)_{239650} \\ \ell_{3775} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{378393} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{3796033} = \mathbf{PI}(57, 56, 35, 56, 1, 0)_{240434} \\ \ell_{3776} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{53} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{6606699} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{3333505} = \mathbf{PI}(57, 56, 35, 56, 1, 0)_{240847} \\ \ell_{3779} &= \begin{bmatrix} 1 & \epsilon^{49} & \epsilon^{49} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8118110} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{33384705} = \mathbf{PI}(57, 56, 50, 56, 1, 0)_{240847} \\ \ell_{3781} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{270017} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & \epsilon^{11} \end{bmatrix}_{2784449} = \mathbf{PI}(58, 30, 30, 30, 1, 0)_{137402} \\ \ell_{3782} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{16780033} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{12784449} = \mathbf{PI}(58, 30, 25, 30, 1, 0)_{137591} \\ \ell_{3784} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{3852137} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{16780033} = \mathbf{PI}(58, 30, 59, 30, 1, 0)_{1375924} \\ \ell_{3785} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{16780033} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{16780033} = \mathbf{PI}(58, 30, 59, 30, 1, 0)_{137594} \\ \ell_{3787} &= \begin{bmatrix} 1$$

$$\begin{split} \ell_{3790} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{9} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{12518721} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{12518721} = \mathbf{PI}(58, 30, 14, 30, 1, 0)_{136331} \\ \ell_{3791} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{9853633} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{2133825} = \mathbf{PI}(58, 30, 16, 30, 1, 0)_{136457} \\ \ell_{3792} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{32} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{2133825} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{6926657} = \mathbf{PI}(58, 30, 33, 30, 1, 0)_{138788} \\ \ell_{3793} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{46} \end{bmatrix}_{6926657} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{10122177} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{10122177} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{5594113} = \mathbf{PI}(58, 30, 23, 30, 1, 0)_{13698} \\ \ell_{3795} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{5594113} = \begin{bmatrix} 1 & 0 & 0 & 21 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{5594113} = \mathbf{PI}(58, 30, 9, 30, 1, 0)_{136016} \\ \ell_{3797} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{15} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{1601857} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{11717953} = \mathbf{PI}(58, 30, 27, 30, 1, 0)_{137160} \\ \ell_{3798} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{16248129} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{16248129} = \mathbf{PI}(58, 30, 39, 30, 1, 0)_{137906} \\ \ell_{3799} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{16238703} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{16248129} = \mathbf{PI}(58, 30, 27, 30, 1, 0)_{137906} \\ \ell_{3800} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{1032005} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{3997633} = \mathbf{PI}(58, 30, 28, 30, 1, 0)_{137213} \\ \ell_{3801} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{10920065} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{10920065} = \mathbf{PI}(58, 30, 32, 30, 1, 0)_{138914} \\ \ell_{3803} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{10920065} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{10920065} = \mathbf{PI}(58, 30, 32, 30, 1, 0)_{138915} \\ \ell_{3804} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{10920065} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{10920065} = \mathbf{PI}(58, 30, 41, 30, 1, 0)_{138915} \\ \ell_{3805} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{10920065} = \begin{bmatrix} 1 &$$

$$\begin{split} \ell_{3811} &= \begin{bmatrix} 1 & 0 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{13315713} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{13315713} = \mathbf{PI}(58, 30, 12, 30, 1, 0)_{136205} \\ \ell_{3812} &= \begin{bmatrix} 1 & 0 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{8} \end{bmatrix}_{301921} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{801921} = \mathbf{PI}(58, 30, 10, 30, 1, 0)_{136079} \\ \ell_{3813} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{8} \end{bmatrix}_{13051393} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{13051393} = \mathbf{PI}(58, 30, 20, 30, 1, 0)_{136709} \\ \ell_{3814} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{7} \end{bmatrix}_{1054401} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{1054401} = \mathbf{PI}(58, 30, 40, 30, 1, 0)_{137969} \\ \ell_{3816} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{12251777} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{12251777} = \mathbf{PI}(58, 30, 19, 30, 1, 0)_{136646} \\ \ell_{3817} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{3728897} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{3728897} = \mathbf{PI}(58, 30, 47, 30, 1, 0)_{138510} \\ \ell_{3819} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{54} \end{bmatrix}_{3324289} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{3728897} = \mathbf{PI}(58, 30, 49, 30, 1, 0)_{138536} \\ \ell_{3821} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{3324289} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{3728897} = \mathbf{PI}(58, 30, 49, 30, 1, 0)_{138536} \\ \ell_{3822} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{14648257} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{14141945} = \mathbf{PI}(58, 30, 38, 30, 1, 0)_{137987} \\ \ell_{3824} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{14648257} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{14114945} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 13 \end{bmatrix}_{14114945} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{14593335} = \mathbf{PI}(58, 30, 33, 30, 1, 0)_{137928} \\ \ell_{3824} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{14648257} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{14648257} = \mathbf{PI}(58, 30, 33, 30, 1, 0)_{137928} \\ \ell_{3826} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{353953} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{2665989} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{2665989} = \mathbf{PI}(58, 30, 33, 30, 1, 0)_{137276} \\ \ell_{3829} &= \begin{bmatrix} 1 & 0 &$$

$$\begin{split} \ell_{3832} &= \begin{bmatrix} 1 & 0 & 0 & e^{30} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{14382593} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{14382593} = \mathbf{PI}(58, 30, 22, 30, 1, 0)_{136835} \\ \ell_{3833} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{47} \end{bmatrix}_{13851329} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{11451841} = \mathbf{PI}(58, 30, 8, 30, 1, 0)_{136935} \\ \ell_{3834} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{37} \end{bmatrix}_{13851329} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{13851329} = \mathbf{PI}(58, 30, 42, 30, 1, 0)_{138935} \\ \ell_{3835} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{11185225} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{11188225} = \mathbf{PI}(58, 30, 52, 30, 1, 0)_{138725} \\ \ell_{3836} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14915385} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{14915385} = \mathbf{PI}(58, 30, 35, 30, 1, 0)_{13754} \\ \ell_{3838} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{14915385} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 40 \end{bmatrix}_{14915385} = \mathbf{PI}(58, 30, 35, 30, 1, 0)_{137512} \\ \ell_{3839} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{7725761} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{7989185} = \mathbf{PI}(58, 30, 36, 30, 1, 0)_{137717} \\ \ell_{3840} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{4795393} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{4795393} = \mathbf{PI}(58, 30, 58, 30, 1, 0)_{139103} \\ \ell_{3841} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{4795393} = \begin{bmatrix} 1 & 0 & 0 & 25 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{13797875} = \mathbf{PI}(58, 30, 63, 0, 1, 0)_{135827} \\ \ell_{3843} &= \begin{bmatrix} 1 & e^{38} & e^{38} & 0 \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{13797875} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{13797875} = \mathbf{PI}(58, 30, 63, 0, 1, 0)_{135827} \\ \ell_{3844} &= \begin{bmatrix} 1 & e^{38} & e^{38} & 0 \\ 0 & 1 & 1 & e^{27} \end{bmatrix}_{137917875} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{13797875} = \mathbf{PI}(58, 30, 63, 0, 1, 0)_{135827} \\ \ell_{3845} &= \begin{bmatrix} 1 & 0 & 0 & e^{49} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{12785473} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{799105} = \mathbf{PI}(59, 51, 50, 51, 1, 0)_{222012} \\ \ell_{3846} &= \begin{bmatrix} 1 & 0 & 0 & e^{49} \\ 0 & 1 & 1 & e^{24} \end{bmatrix}_{12785473} = \begin{bmatrix} 1 & 0 & 0 & 30 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{6393729} = \mathbf{PI}(59, 51, 52, 51, 1, 0)_{222075} \\ \ell_{3$$

$$\begin{split} \ell_{3853} &= \begin{bmatrix} 1 & 0 & 0 & e^{29} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{7190849} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 10 \end{bmatrix}_{7190849} = \mathbf{Pl}(59, 51, 47, 51, 1, 0)_{221760} \\ \ell_{3854} &= \begin{bmatrix} 1 & 0 & 0 & e^{49} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{12516865} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{12516865} = \mathbf{Pl}(59, 51, 27, 51, 1, 0)_{220500} \\ \ell_{3855} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{9855489} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{9855489} = \mathbf{Pl}(59, 51, 40, 51, 1, 0)_{221319} \\ \ell_{3856} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{38} \end{bmatrix}_{2134337} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{2134337} = \mathbf{Pl}(59, 51, 18, 51, 1, 0)_{219933} \\ \ell_{3858} &= \begin{bmatrix} 1 & 0 & 0 & e^{32} \\ 0 & 1 & 1 & e^{18} \end{bmatrix}_{10120513} = \begin{bmatrix} 1 & 0 & 0 & 38 \\ 0 & 1 & 1 & 15 \end{bmatrix}_{10120513} = \mathbf{Pl}(59, 51, 21, 51, 1, 0)_{220122} \\ \ell_{3859} &= \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{14} \end{bmatrix}_{1601473} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{1501473} = \mathbf{Pl}(59, 51, 38, 51, 1, 0)_{220327} \\ \ell_{3861} &= \begin{bmatrix} 1 & 0 & 0 & e^{20} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{11719745} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{11719745} = \mathbf{Pl}(59, 51, 11, 51, 1, 0)_{219492} \\ \ell_{3863} &= \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{10244805} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{7457025} = \begin{bmatrix} 1 & 0 & 0 & 28 \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{10389185} = \mathbf{Pl}(59, 51, 54, 51, 1, 0)_{222201} \\ \ell_{3864} &= \begin{bmatrix} 1 & 0 & 0 & e^{43} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{99956419} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{9995033} = \mathbf{Pl}(59, 51, 23, 51, 1, 0)_{222186} \\ \ell_{3865} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{99956419} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{16513473} = \mathbf{Pl}(59, 51, 25, 51, 1, 0)_{222014} \\ \ell_{3866} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{10321537} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{99350449} = \mathbf{Pl}(59, 51, 25, 51, 1, 0)_{222048} \\ \ell_{3867} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{10521537} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{16513473} = \mathbf{Pl}(59, 51, 23, 51, 1, 0)_{222048} \\ \ell_{3869} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{6} \end{bmatrix}_{10515473} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 46 \end{bmatrix}_{1068161} = \mathbf{Pl}(59$$

$$\begin{split} \ell_{3874} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{15446081} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{15446081} = \mathbf{PI}(59, 51, 45, 51, 1, 0)_{221034} \\ \ell_{3875} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{3318913} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{33318913} = \mathbf{PI}(59, 51, 30, 51, 1, 0)_{220689} \\ \ell_{3876} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{29} \end{bmatrix}_{3050305} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{13050305} = \mathbf{PI}(59, 51, 34, 51, 1, 0)_{220841} \\ \ell_{3877} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{13050305} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 22 \end{bmatrix}_{13050305} = \mathbf{PI}(59, 51, 34, 51, 1, 0)_{220841} \\ \ell_{3879} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{19} \\ 0 & 1 & 1 & \epsilon^{14} \end{bmatrix}_{560865} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{10652865} = \mathbf{PI}(59, 51, 37, 51, 1, 0)_{221130} \\ \ell_{3880} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{27} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{10652865} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{10652865} = \mathbf{PI}(59, 51, 37, 51, 1, 0)_{221130} \\ \ell_{3881} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{26} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{2930433} = \begin{bmatrix} 1 & 0 & 0 & 46 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3728513} = \mathbf{PI}(59, 51, 34, 51, 1, 0)_{220311} \\ \ell_{3883} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{20} \end{bmatrix}_{3728513} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3728513} = \mathbf{PI}(59, 51, 24, 51, 1, 0)_{220311} \\ \ell_{3884} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{9322305} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{9322305} = \mathbf{PI}(59, 51, 13, 51, 1, 0)_{210618} \\ \ell_{3885} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{37} \end{bmatrix}_{3292473} = \begin{bmatrix} 1 & 0 & 0 & 20 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{9322305} = \mathbf{PI}(59, 51, 13, 51, 1, 0)_{210618} \\ \ell_{3886} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{1417697} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{6126593} = \mathbf{PI}(59, 51, 57, 51, 1, 0)_{222705} \\ \ell_{3886} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{14117697} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 25 \end{bmatrix}_{6126593} = \mathbf{PI}(59, 51, 48, 51, 1, 0)_{222390} \\ \ell_{3887} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{14117697} = \begin{bmatrix} 1 & 0 & 0 & 17 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{1864272} = \mathbf{PI}(59, 51, 48, 51, 1, 0)_{221823} \\ \ell_{3899} &= \begin{bmatrix} 1 & 0 &$$

$$\begin{split} \ell_{3895} &= \begin{bmatrix} 1 & 0 & 0 & e^{25} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{15715777} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{15715777} = \mathbf{PI}(59, 51, 29, 51, 1, 0)_{220626} \\ \ell_{3806} &= \begin{bmatrix} 1 & 0 & 0 & e^{30} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{13131697} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{14331697} = \mathbf{PI}(59, 51, 39, 51, 1, 0)_{221256} \\ \ell_{3897} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{5} \end{bmatrix}_{11453569} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{11453569} = \mathbf{PI}(59, 51, 20, 51, 1, 0)_{220059} \\ \ell_{3898} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{13848001} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{13848001} = \mathbf{PI}(59, 51, 32, 51, 1, 0)_{220815} \\ \ell_{3899} &= \begin{bmatrix} 1 & 0 & 0 & e^{16} \\ 0 & 1 & 1 & e^{41} \end{bmatrix}_{11185561} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{13184901} = \mathbf{PI}(59, 51, 32, 51, 1, 0)_{220815} \\ \ell_{3900} &= \begin{bmatrix} 1 & 0 & 0 & e^{21} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{15182081} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 16 \end{bmatrix}_{14914019} = \mathbf{PI}(59, 51, 53, 51, 1, 0)_{222138} \\ \ell_{3901} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & 1 \end{bmatrix}_{13581569} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{13581569} = \mathbf{PI}(59, 51, 53, 51, 1, 0)_{222516} \\ \ell_{3903} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{30} \end{bmatrix}_{7726081} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{7726081} = \mathbf{PI}(59, 51, 59, 51, 1, 0)_{222576} \\ \ell_{3904} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{6659457} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{6639457} = \mathbf{PI}(59, 51, 60, 51, 1, 0)_{222579} \\ \ell_{3905} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{1332865} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1332865} = \mathbf{PI}(59, 51, 59, 51, 10)_{133246} \\ \ell_{3907} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{1332865} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{1332865} = \mathbf{PI}(60, 29, 28, 29, 1, 0)_{133246} \\ \ell_{3909} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{12781513} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{4794899} = \mathbf{PI}(60, 29, 58, 29, 1, 0)_{133246} \\ \ell_{3909} &= \begin{bmatrix} 1 & 0 & 0 & e^{53} \\ 0 & 1 & 1 & e^{53} \end{bmatrix}_{12781513} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 19 \end{bmatrix}_{4794899} = \mathbf{PI}(60, 29, 58, 29, 1, 0)_{133399} \\ \ell_{3910} &= \begin{bmatrix} 1 & 0 &$$

$$\begin{split} \ell_{3916} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{60} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{3190169} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 55 \end{bmatrix}_{3190169} = \mathbf{Pl}(60, 29, 42, 29, 1, 0)_{134128} \\ \ell_{3917} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{40} \end{bmatrix}_{7192897} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{7192897} = \mathbf{Pl}(60, 29, 55, 29, 1, 0)_{134917} \\ \ell_{3918} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{59} \end{bmatrix}_{12516673} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{12516673} = \mathbf{Pl}(60, 29, 16, 29, 1, 0)_{132490} \\ \ell_{3919} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{32} \end{bmatrix}_{9854913} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{9854913} = \mathbf{Pl}(60, 29, 13, 29, 1, 0)_{132301} \\ \ell_{3920} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{6925313} = \begin{bmatrix} 1 & 0 & 0 & 8 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{330753} = \mathbf{Pl}(60, 29, 63, 29, 1, 0)_{133624} \\ \ell_{3921} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{6925313} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{6925313} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{10123585} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{10123585} = \mathbf{Pl}(60, 29, 24, 29, 1, 0)_{133624} \\ \ell_{3924} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{59} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{1003575} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{1600577} = \mathbf{Pl}(60, 29, 24, 29, 1, 0)_{134821} \\ \ell_{3925} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{1073575} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{1600577} = \mathbf{Pl}(60, 29, 40, 29, 1, 0)_{134821} \\ \ell_{3926} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{19} \end{bmatrix}_{16245889} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{16245889} = \mathbf{Pl}(60, 29, 15, 29, 1, 0)_{132427} \\ \ell_{3927} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{28} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{16245890} = \begin{bmatrix} 1 & 0 & 0 & 61 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{30086049} = \mathbf{Pl}(60, 29, 32, 29, 1, 0)_{133438} \\ \ell_{3929} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{1085619} = \begin{bmatrix} 1 & 0 & 0 & 15 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{30086049} = \mathbf{Pl}(60, 29, 32, 29, 1, 0)_{133438} \\ \ell_{3933} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{1068417} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{10921345} = \mathbf{Pl}(60, 29, 7, 29, 1, 0)_{133435} \\ \ell_{3933} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{24} \end{bmatrix}_{106313921} = \begin{bmatrix} 1 & 0 &$$

$$\ell_{3337} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{15980865} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{15980865} = \mathbf{PI}(60, 29, 23, 29, 1, 0)_{132931}$$

$$\ell_{3938} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{15445761} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{15445761} = \mathbf{PI}(60, 29, 48, 29, 1, 0)_{134506}$$

$$\ell_{3939} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{39} \end{bmatrix}_{13315649} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{13315649} = \mathbf{PI}(60, 29, 45, 29, 1, 0)_{134317}$$

$$\ell_{3940} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{301281} = \begin{bmatrix} 1 & 0 & 0 & 3 \\ 0 & 1 & 1 & 37 \end{bmatrix}_{801281} = \mathbf{PI}(60, 29, 11, 29, 1, 0)_{132175}$$

$$\ell_{3941} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{3051073} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{13051073} = \mathbf{PI}(60, 29, 22, 29, 1, 0)_{132868}$$

$$\ell_{3942} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{30653249} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{10653249} = \mathbf{PI}(60, 29, 49, 29, 1, 0)_{13459}$$

$$\ell_{3943} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{10653249} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{12253697} = \mathbf{PI}(60, 29, 30, 29, 1, 0)_{134254}$$

$$\ell_{3944} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{2931393} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{2931393} = \mathbf{PI}(60, 29, 30, 29, 1, 0)_{134571}$$

$$\ell_{3945} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{55} \end{bmatrix}_{2931393} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{2931393} = \mathbf{PI}(60, 29, 30, 29, 1, 0)_{134571}$$

$$\ell_{3946} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{3731301} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{3731201} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{3329655} = \mathbf{PI}(60, 29, 30, 29, 1, 0)_{133561}$$

$$\ell_{3947} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{55} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{3323777} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{3323777} = \mathbf{PI}(60, 29, 30, 29, 1, 0)_{133561}$$

$$\ell_{3949} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{3323777} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{322649} = \mathbf{PI}(60, 29, 57, 29, 1, 0)_{133561}$$

$$\ell_{3950} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{14647297} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{14647297} = \mathbf{PI}$$

$$\ell_{3958} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{8256961} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{8256961} = \mathbf{Pl}(60, 29, 4, 29, 1, 0)_{131734}$$

$$\ell_{3969} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{15715905} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 62 \end{bmatrix}_{15715905} = \mathbf{Pl}(60, 29, 25, 29, 1, 0)_{133057}$$

$$\ell_{3960} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{14383809} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{1453399} = \mathbf{Pl}(60, 29, 43, 29, 1, 0)_{134191}$$

$$\ell_{3961} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{11454401} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{11454401} = \mathbf{Pl}(60, 29, 54, 29, 1, 0)_{134884}$$

$$\ell_{3962} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{13850625} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{13850625} = \mathbf{Pl}(60, 29, 17, 29, 1, 0)_{132238}$$

$$\ell_{3963} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{16} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{11185281} = \begin{bmatrix} 1 & 0 & 0 & 42 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{11185281} = \mathbf{Pl}(60, 29, 12, 29, 1, 0)_{132238}$$

$$\ell_{3964} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{15181825} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{14914753} = \mathbf{Pl}(60, 29, 20, 29, 1, 0)_{132049}$$

$$\ell_{3965} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{43} \\ 0 & 1 & 1 & \epsilon^{36} \end{bmatrix}_{7991425} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{7991425} = \mathbf{Pl}(60, 29, 46, 29, 1, 0)_{13488}$$

$$\ell_{3967} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & 28 \end{bmatrix}_{7722881} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{7722881} = \mathbf{Pl}(60, 29, 59, 29, 1, 0)_{131543}$$

$$\ell_{3969} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{1332417} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{7722881} = \mathbf{Pl}(60, 29, 59, 29, 1, 0)_{131599}$$

$$\ell_{3970} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{38} \end{bmatrix}_{1332417} = \begin{bmatrix} 1 & 0 & 0 & 29 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1332347} = \mathbf{Pl}(60, 29, 38, 29, 1, 0)_{13159}$$

$$\ell_{3971} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{28} \end{bmatrix}_{12724699} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1432237} = \mathbf{Pl}(61, 18, 18, 18, 1, 0)_{98921}$$

$$\ell_{3973} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{12755537} = \begin{bmatrix} 1 & 0 & 0 & 48 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1724699} = \mathbf{Pl}(61, 18, 54, 18, 1, 0)_{9892}$$

$$\ell_{3974} = \begin{bmatrix} 1 & 0 &$$

$$\begin{split} &\ell_{4000} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{22} \\ 0 & 1 & 1 & \epsilon^{50} \end{bmatrix}_{5003017} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 60 \end{bmatrix}_{5003017} = \mathbf{Pl}(61,18,29,18,1,0)_{89051} \\ &\ell_{4001} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{50} \\ 0 & 1 & 1 & \epsilon^{15} \end{bmatrix}_{15979585} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 21 \end{bmatrix}_{15979585} = \mathbf{Pl}(61,18,15,18,1,0)_{88709} \\ &\ell_{4002} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{1549217} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{1549217} = \mathbf{Pl}(61,18,57,18,1,0)_{91415} \\ &\ell_{4003} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{52} \\ 0 & 1 & 1 & \epsilon^{17} \end{bmatrix}_{13318593} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 53 \end{bmatrix}_{13318593} = \mathbf{Pl}(61,18,43,18,1,0)_{90533} \\ &\ell_{4004} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{801345} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{3318593} = \mathbf{Pl}(61,18,28,18,1,0)_{89588} \\ &\ell_{4005} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{27} \end{bmatrix}_{13050113} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{3050113} = \mathbf{Pl}(61,18,28,18,1,0)_{99588} \\ &\ell_{4006} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{57} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{5862209} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{3050333} = \mathbf{Pl}(61,18,28,18,1,0)_{90470} \\ &\ell_{4007} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{12251265} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{10655809} = \mathbf{Pl}(61,18,56,18,1,0)_{91352} \\ &\ell_{4008} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{58} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{12251265} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 20 \end{bmatrix}_{12251265} = \mathbf{Pl}(61,18,53,18,1,0)_{90281} \\ &\ell_{4010} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{18} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{323897} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{3730305} = \mathbf{Pl}(61,18,5,18,1,0)_{91067} \\ &\ell_{4011} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{49} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{332897} = \begin{bmatrix} 1 & 0 & 0 & 22 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{5328997} = \mathbf{Pl}(61,18,61,18,1,0)_{90683} \\ &\ell_{4011} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{48} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{332897} = \begin{bmatrix} 1 & 0 & 0 & 23 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{5328997} = \mathbf{Pl}(61,18,61,18,1,0)_{90697} \\ &\ell_{4013} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{1416481} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{1450689} = \mathbf{Pl}(61,18,25,18,1,0)_{90984} \\ &\ell_{4014} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{47} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{14165089} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 6 \end{bmatrix}_$$

$$\begin{split} \ell_{4021} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{40} \\ 0 & 1 & 1 & \epsilon^{34} \end{bmatrix}_{8788609} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{8788609} = \mathbf{PI}(61, 18, 27, 18, 1, 0)_{89525} \\ \ell_{4022} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{21} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{8255873} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 7 \end{bmatrix}_{8255873} = \mathbf{PI}(61, 18, 45, 18, 1, 0)_{90659} \\ \ell_{4023} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{53} \end{bmatrix}_{15712257} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 5 \end{bmatrix}_{15712257} = \mathbf{PI}(61, 18, 63, 18, 1, 0)_{91793} \\ \ell_{4024} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{58} \end{bmatrix}_{14380609} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 3 \end{bmatrix}_{14380609} = \mathbf{PI}(61, 18, 32, 18, 1, 0)_{89840} \\ \ell_{4025} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{61} \end{bmatrix}_{11453057} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{13849345} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{13849345} = \mathbf{PI}(61, 18, 2, 18, 1, 0)_{89210} \\ \ell_{4026} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{41} \end{bmatrix}_{1318945} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{11186945} = \mathbf{PI}(61, 18, 2, 18, 1, 0)_{89210} \\ \ell_{4028} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{49} \end{bmatrix}_{15181249} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 30 \end{bmatrix}_{15181249} = \mathbf{PI}(61, 18, 58, 18, 1, 0)_{90344} \\ \ell_{4029} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{14915265} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{14915265} = \mathbf{PI}(61, 18, 40, 18, 1, 0)_{90344} \\ \ell_{4030} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{1392833} = \begin{bmatrix} 1 & 0 & 0 & 57 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{13952017} = \mathbf{PI}(61, 18, 30, 18, 1, 0)_{88580} \\ \ell_{4031} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{38} \\ 0 & 1 & 1 & \epsilon^{3} \end{bmatrix}_{1392833} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 8 \end{bmatrix}_{4793537} = \mathbf{PI}(61, 18, 11, 18, 1, 0)_{88587} \\ \ell_{4032} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{6600289} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{1332225} = \mathbf{PI}(61, 18, 37, 18, 1, 0)_{91055} \\ \ell_{4034} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{18} \end{bmatrix}_{3332225} = \begin{bmatrix} 1 & 0 & 0 & 51 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{13313777} = \mathbf{PI}(62, 25, 24, 25, 1, 0)_{117120} \\ \ell_{4037} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{51} \\ 0 & 1 & 1 & \epsilon^{12} \end{bmatrix}_{270273} = \begin{bmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 6 \end{bmatrix}_{270273} = \mathbf{PI}(62, 25, 5, 25, 1, 0)_{118$$

$$\begin{split} &\ell_{4042} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{4} \\ 0 & 1 & 1 & \epsilon^{16} \end{bmatrix}_{4263553} = \begin{bmatrix} 1 & 0 & 0 & 16 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{4263553} = \mathbf{PI}(62, 25, 55, 25, 1, 0)_{119073} \\ &\ell_{4043} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{24} \\ 0 & 1 & 1 & \epsilon^{9} \end{bmatrix}_{11985985} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 36 \end{bmatrix}_{11985985} = \mathbf{PI}(62, 25, 46, 25, 1, 0)_{118506} \\ &\ell_{4044} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{69} \\ 0 & 1 & 1 & \epsilon^{9} \end{bmatrix}_{3198657} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 47 \end{bmatrix}_{3198057} = \mathbf{PI}(62, 25, 10, 25, 1, 0)_{116238} \\ &\ell_{4045} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{29} \\ 0 & 1 & 1 & \epsilon^{21} \end{bmatrix}_{7192001} = \begin{bmatrix} 1 & 0 & 0 & 27 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{7192001} = \mathbf{PI}(62, 25, 19, 25, 1, 0)_{116805} \\ &\ell_{4046} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{12519937} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{12519937} = \mathbf{PI}(62, 25, 33, 25, 1, 0)_{117687} \\ &\ell_{4047} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{57} \end{bmatrix}_{9853385} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{9856385} = \mathbf{PI}(62, 25, 33, 25, 1, 0)_{117687} \\ &\ell_{4048} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{44} \end{bmatrix}_{6926081} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{6926081} = \mathbf{PI}(62, 25, 22, 25, 1, 0)_{116994} \\ &\ell_{4050} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{23} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{10120705} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 18 \end{bmatrix}_{10120705} = \mathbf{PI}(62, 25, 36, 25, 1, 0)_{119451} \\ &\ell_{4051} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{160321} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 39 \end{bmatrix}_{160321} = \mathbf{PI}(62, 25, 36, 25, 1, 0)_{116868} \\ &\ell_{4052} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{160321} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{11719041} = \mathbf{PI}(62, 25, 38, 25, 1, 0)_{116877} \\ &\ell_{4053} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{20} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{160321} = \begin{bmatrix} 1 & 0 & 0 & 24 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{11719041} = \mathbf{PI}(62, 25, 38, 25, 1, 0)_{116877} \\ &\ell_{4054} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{1623537} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{11719041} = \mathbf{PI}(62, 25, 38, 25, 1, 0)_{116427} \\ &\ell_{4055} = \begin{bmatrix} 1 & 0 & 0 & \epsilon^{45} \\ 0 & 1 & 1 & \epsilon^{65} \end{bmatrix}_{9926385} = \begin{bmatrix} 1 & 0 & 0 & 44 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{3995329} = \mathbf{PI}(62, 25, 35, 25, 1, 0)_{116112} \\ &\ell_{4058} = \begin{bmatrix} 1 & 0 & 0 &$$

$$\begin{split} &\ell_{4063} = \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{2399489} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 43 \end{bmatrix}_{2399489} = \mathbf{Pl}(62, 25, 32, 51, 0)_{118947} \\ &\ell_{4064} = \begin{bmatrix} 1 & 0 & 0 & e^{22} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{5060353} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 9 \end{bmatrix}_{5060353} = \mathbf{Pl}(62, 25, 27, 25, 1, 0)_{117309} \\ &\ell_{4065} = \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{15961313} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{15981313} = \mathbf{Pl}(62, 25, 2, 25, 1, 0)_{118734} \\ &\ell_{4066} = \begin{bmatrix} 1 & 0 & 0 & e^{14} \\ 0 & 1 & 1 & e^{26} \end{bmatrix}_{1547105} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 23 \end{bmatrix}_{15447105} = \mathbf{Pl}(62, 25, 41, 25, 1, 0)_{118191} \\ &\ell_{4067} = \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{33315329} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{13315329} = \mathbf{Pl}(62, 25, 48, 25, 1, 0)_{118128} \\ &\ell_{4069} = \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{801153} = \begin{bmatrix} 1 & 0 & 0 & 35 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{801153} = \mathbf{Pl}(62, 25, 40, 25, 1, 0)_{118128} \\ &\ell_{4069} = \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{31} \end{bmatrix}_{5850521} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 33 \end{bmatrix}_{13051009} = \mathbf{Pl}(62, 25, 40, 25, 1, 0)_{118746} \\ &\ell_{4071} = \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{5} \end{bmatrix}_{10654209} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 32 \end{bmatrix}_{10654209} = \mathbf{Pl}(62, 25, 3, 25, 1, 0)_{115797} \\ &\ell_{4072} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{2250433} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{2932801} = \mathbf{Pl}(62, 25, 52, 25, 1, 0)_{118843} \\ &\ell_{4074} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3731457} = \begin{bmatrix} 1 & 0 & 0 & 11 \\ 0 & 1 & 1 & 54 \end{bmatrix}_{2932801} = \mathbf{Pl}(62, 25, 34, 25, 1, 0)_{117561} \\ &\ell_{4076} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3731457} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{3731457} = \mathbf{Pl}(62, 25, 34, 25, 1, 0)_{117561} \\ &\ell_{4076} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{23} \end{bmatrix}_{3732049} = \begin{bmatrix} 1 & 0 & 0 & 14 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{3731457} = \mathbf{Pl}(62, 25, 34, 25, 1, 0)_{117561} \\ &\ell_{4076} = \begin{bmatrix} 1 & 0 & 0 & e^{15} \\ 0 & 1 & 1 & e^{15} \end{bmatrix}_{14115841} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{3322049} = \mathbf{Pl}(62, 25, 39, 25, 1, 0)_{116175} \\ &\ell_{4078} = \begin{bmatrix} 1 & 0 & 0 & e^{13}$$

$$\begin{split} \ell_{4084} &= \begin{bmatrix} 1 & 0 & 0 & 0 & \epsilon \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{534465} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{534465} = PI(62, 25, 60, 25, 1, 0)_{119388} \\ \ell_{4085} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{8257857} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 11 \end{bmatrix}_{3788737} = PI(62, 25, 37, 25, 1, 0)_{117939} \\ \ell_{4086} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{11} \\ 0 & 1 & 1 & \epsilon^{23} \end{bmatrix}_{8257857} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{8257857} = PI(62, 25, 14, 25, 1, 0)_{116490} \\ \ell_{4087} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{25} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{14349001} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{15714561} = PI(62, 25, 23, 25, 1, 0)_{117057} \\ \ell_{4089} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{30} \\ 0 & 1 & 1 & \epsilon^{42} \end{bmatrix}_{14349001} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 56 \end{bmatrix}_{14384001} = PI(62, 25, 57, 25, 1, 0)_{117024} \\ \ell_{4099} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{33} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{13850177} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{1188673} = PI(62, 25, 13, 25, 1, 0)_{116301} \\ \ell_{4091} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{10} \\ 0 & 1 & 1 & \epsilon^{25} \end{bmatrix}_{11188673} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{1188673} = PI(62, 25, 54, 25, 1, 0)_{116742} \\ \ell_{4092} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{14} \\ 0 & 1 & 1 & \epsilon^{33} \end{bmatrix}_{15182657} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 52 \end{bmatrix}_{15182657} = PI(62, 25, 47, 25, 1, 0)_{119010} \\ \ell_{4094} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{42} \\ 0 & 1 & 1 & \epsilon^{35} \end{bmatrix}_{14913665} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{7990657} = PI(62, 25, 47, 25, 1, 0)_{115860} \\ \ell_{4095} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{45} \end{bmatrix}_{14913665} = \begin{bmatrix} 1 & 0 & 0 & 53 \\ 0 & 1 & 1 & 24 \end{bmatrix}_{7990657} = PI(62, 25, 29, 25, 1, 0)_{117435} \\ \ell_{4096} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{35} \\ 0 & 1 & 1 & \epsilon^{47} \end{bmatrix}_{4796993} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{7726593} = PI(62, 25, 12, 5, 1, 0)_{118264} \\ \ell_{4097} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{4796993} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{7726593} = PI(62, 25, 12, 5, 1, 0)_{118254} \\ \ell_{4099} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{4796993} = \begin{bmatrix} 1 & 0 & 0 & 18 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{7726593} = PI(62, 25, 12, 5, 1, 0)_{118254} \\ \ell_{4099} &= \begin{bmatrix} 1 & 0 & 0 & \epsilon^{13} \\ 0 & 1 & 1 & \epsilon^{13} \end{bmatrix}_{479699$$

$$\begin{split} \ell_{4105} &= \begin{bmatrix} 1 & 0 & 0 & e^{4D} \\ 0 & 1 & 1 & e^{2D} \end{bmatrix}_{16779969} = \begin{bmatrix} 1 & 0 & 0 & 63 \\ 0 & 1 & 1 & 44 \end{bmatrix}_{16779969} = \mathbf{Pl}(63, 5, 17, 5, 1, 0)_{37300} \\ \ell_{4106} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{11984257} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & 58 \end{bmatrix}_{4264577} = \mathbf{Pl}(63, 5, 30, 5, 1, 0)_{38119} \\ \ell_{4107} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{11984257} = \begin{bmatrix} 1 & 0 & 0 & 45 \\ 0 & 1 & 1 & e^{34} \end{bmatrix}_{11984257} = \mathbf{Pl}(63, 5, 27, 5, 1, 0)_{37930} \\ \ell_{4108} &= \begin{bmatrix} 1 & 0 & 0 & e^{60} \\ 0 & 1 & 1 & e^{7} \end{bmatrix}_{3197389} = \begin{bmatrix} 1 & 0 & 0 & 12 \\ 0 & 1 & 1 & 35 \end{bmatrix}_{3197889} = \mathbf{Pl}(63, 5, 40, 5, 1, 0)_{38749} \\ \ell_{4109} &= \begin{bmatrix} 1 & 0 & 0 & e^{29} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{12517097} = \begin{bmatrix} 1 & 0 & 0 & 47 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{12517097} = \mathbf{Pl}(63, 5, 45, 5, 1, 0)_{38857} \\ \ell_{4111} &= \begin{bmatrix} 1 & 0 & 0 & e^{45} \\ 0 & 1 & 1 & e^{19} \end{bmatrix}_{12517097} = \begin{bmatrix} 1 & 0 & 0 & 37 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{2132289} = \mathbf{Pl}(63, 5, 39, 5, 1, 0)_{3886} \\ \ell_{4112} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{13} \end{bmatrix}_{2132289} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 29 \end{bmatrix}_{2132289} = \mathbf{Pl}(63, 5, 60, 5, 1, 0)_{40009} \\ \ell_{4113} &= \begin{bmatrix} 1 & 0 & 0 & e^{23} \\ 0 & 1 & 1 & e^{25} \end{bmatrix}_{5596161} = \begin{bmatrix} 1 & 0 & 0 & 26 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{5596161} = \mathbf{Pl}(63, 5, 51, 5, 1, 0)_{39442} \\ \ell_{4116} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{1720833} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 59 \end{bmatrix}_{1520839} = \mathbf{Pl}(63, 5, 52, 5, 1, 0)_{39442} \\ \ell_{4117} &= \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{1720833} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{16247809} = \mathbf{Pl}(63, 5, 52, 5, 1, 0)_{39442} \\ \ell_{4116} &= \begin{bmatrix} 1 & 0 & 0 & e^{28} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{1720833} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{16247809} = \mathbf{Pl}(63, 5, 52, 5, 1, 0)_{39505} \\ \ell_{4119} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{17208313} = \begin{bmatrix} 1 & 0 & 0 & 6 \\ 0 & 1 & 1 & 51 \end{bmatrix}_{10386561} = \mathbf{Pl}(63, 5, 52, 5, 1, 0)_{38245} \\ \ell_{4120} &= \begin{bmatrix} 1 & 0 & 0 & e^{48} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{17208133} = \begin{bmatrix} 1 & 0 & 0 & 41 \\ 0 & 1 & 1 & 1 \end{bmatrix}_{10386561} = \mathbf{Pl}(63, 5, 22, 5, 1, 0)_{38245} \\ \ell_{4121} &= \begin{bmatrix} 1 & 0 & 0 & e^{44} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}$$

$$\begin{split} \ell_{4126} &= \begin{bmatrix} 1 & 0 & 0 & e^{34} \\ 0 & 1 & 1 & e^{41} \end{bmatrix}_{3463745} = \begin{bmatrix} 1 & 0 & 0 & 13 \\ 0 & 1 & 1 & 28 \end{bmatrix}_{3463745} = \mathbf{Pl}(63,5,19,5,1,0)_{37426} \\ \ell_{4127} &= \begin{bmatrix} 1 & 0 & 0 & e^{24} \\ 0 & 1 & 1 & e^{44} \end{bmatrix}_{2398913} = \begin{bmatrix} 1 & 0 & 0 & 9 \\ 0 & 1 & 1 & 34 \end{bmatrix}_{2398913} = \mathbf{Pl}(63,5,22,5,1,0)_{37615} \\ \ell_{4128} &= \begin{bmatrix} 1 & 0 & 0 & e^{22} \\ 0 & 1 & 1 & e^{32} \end{bmatrix}_{5061441} = \begin{bmatrix} 1 & 0 & 0 & 19 \\ 0 & 1 & 1 & 26 \end{bmatrix}_{5061441} = \mathbf{Pl}(63,5,13,5,1,0)_{37048} \\ \ell_{4129} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{60} \end{bmatrix}_{15979009} = \begin{bmatrix} 1 & 0 & 0 & 60 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{15979009} = \mathbf{Pl}(63,5,8,5,1,0)_{3673} \\ \ell_{4130} &= \begin{bmatrix} 1 & 0 & 0 & e^{50} \\ 0 & 1 & 1 & e^{62} \end{bmatrix}_{13318273} = \begin{bmatrix} 1 & 0 & 0 & 58 \\ 0 & 1 & 1 & 45 \end{bmatrix}_{15448513} = \mathbf{Pl}(63,5,7,5,1,0)_{36670} \\ \ell_{4131} &= \begin{bmatrix} 1 & 0 & 0 & e^{52} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{13318273} = \begin{bmatrix} 1 & 0 & 0 & 50 \\ 0 & 1 & 1 & 48 \end{bmatrix}_{13318273} = \mathbf{Pl}(63,5,2,5,1,0)_{36355} \\ \ell_{4132} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{3809611} = \begin{bmatrix} 1 & 0 & 0 & 43 \\ 0 & 1 & 1 & 61 \end{bmatrix}_{3049921} = \mathbf{Pl}(63,5,5,5,1,0)_{36607} \\ \ell_{4134} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{52} \end{bmatrix}_{3860417} = \begin{bmatrix} 1 & 0 & 0 & 49 \\ 0 & 1 & 1 & 27 \end{bmatrix}_{3860417} = \mathbf{Pl}(63,5,9,5,1,0)_{36966} \\ \ell_{4135} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{32} \end{bmatrix}_{12252609} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{12252609} = \mathbf{Pl}(63,5,23,5,1,0)_{36985} \\ \ell_{4136} &= \begin{bmatrix} 1 & 0 & 0 & e^{56} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{3732997} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 41 \end{bmatrix}_{2933249} = \mathbf{Pl}(63,5,23,5,1,0)_{37678} \\ \ell_{4139} &= \begin{bmatrix} 1 & 0 & 0 & e^{55} \\ 0 & 1 & 1 & e^{50} \end{bmatrix}_{3732997} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{3732997} = \mathbf{Pl}(63,5,24,5,1,0)_{37741} \\ \ell_{4140} &= \begin{bmatrix} 1 & 0 & 0 & e^{57} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{1449857} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{332433} = \mathbf{Pl}(63,5,24,5,1,0)_{39383} \\ \ell_{4141} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{1449857} = \begin{bmatrix} 1 & 0 & 0 & 40 \\ 0 & 1 & 1 & 4 \end{bmatrix}_{326337} = \mathbf{Pl}(63,5,46,5,1,0)_{39127} \\ \ell_{4142} &= \begin{bmatrix} 1 & 0 & 0 & e^{47} \\ 0 & 1 & 1 & e^{57} \end{bmatrix}_{14117057} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 49 \end{bmatrix}_{14649857} = \mathbf{Pl}(63,5,35,5,1$$

$$\begin{split} \ell_{4147} &= \begin{bmatrix} 1 & 0 & 0 & e^{54} \\ 0 & 1 & 1 & e^{14} \end{bmatrix}_{2663169} = \begin{bmatrix} 1 & 0 & 0 & 10 \\ 0 & 1 & 1 & 2 \end{bmatrix}_{2663169} = \mathbf{PI}(63, 5, 48, 5, 1, 0)_{39253} \\ \ell_{4149} &= \begin{bmatrix} 1 & 0 & 0 & e^{6} \\ 0 & 1 & 1 & e^{16} \end{bmatrix}_{834593} = \begin{bmatrix} 1 & 0 & 0 & 2 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{84593721} = \mathbf{PI}(63, 5, 50, 5, 1, 0)_{39379} \\ \ell_{4149} &= \begin{bmatrix} 1 & 0 & 0 & e^{6} \\ 0 & 1 & 1 & e^{16} \end{bmatrix}_{8790721} = \begin{bmatrix} 1 & 0 & 0 & 33 \\ 0 & 1 & 1 & 42 \end{bmatrix}_{8790721} = \mathbf{PI}(63, 5, 55, 5, 1, 0)_{39694} \\ \ell_{4150} &= \begin{bmatrix} 1 & 0 & 0 & e^{21} \\ 0 & 1 & 1 & e^{21} \end{bmatrix}_{8259073} = \begin{bmatrix} 1 & 0 & 0 & 31 \\ 0 & 1 & 1 & 57 \end{bmatrix}_{8259073} = \mathbf{PI}(63, 5, 56, 5, 1, 0)_{39757} \\ \ell_{4151} &= \begin{bmatrix} 1 & 0 & 0 & e^{32} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{13438131} = \begin{bmatrix} 1 & 0 & 0 & 59 \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{14381313} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{14381313} = \mathbf{PI}(63, 5, 38, 5, 1, 0)_{38623} \\ \ell_{4152} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{1438133} = \begin{bmatrix} 1 & 0 & 0 & 54 \\ 0 & 1 & 1 & 14 \end{bmatrix}_{14381313} = \mathbf{PI}(63, 5, 38, 5, 1, 0)_{38623} \\ \ell_{4154} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{43} \end{bmatrix}_{13848897} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 17 \end{bmatrix}_{13848897} = \mathbf{PI}(63, 5, 44, 5, 1, 0)_{39001} \\ \ell_{4155} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{46} \end{bmatrix}_{11180241} = \begin{bmatrix} 1 & 0 & 0 & 52 \\ 0 & 1 & 1 & 12 \end{bmatrix}_{11180241} = \mathbf{PI}(63, 5, 26, 5, 1, 0)_{38812} \\ \ell_{4156} &= \begin{bmatrix} 1 & 0 & 0 & e^{46} \\ 0 & 1 & 1 & e^{56} \end{bmatrix}_{114916225} = \begin{bmatrix} 1 & 0 & 0 & 55 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{14916225} = \mathbf{PI}(63, 5, 31, 5, 1, 0)_{38182} \\ \ell_{4158} &= \begin{bmatrix} 1 & 0 & 0 & e^{42} \\ 0 & 1 & 1 & e^{59} \end{bmatrix}_{7895005} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{14916225} = \mathbf{PI}(63, 5, 16, 5, 1, 0)_{37552} \\ \ell_{4169} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{3381485} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 50 \end{bmatrix}_{7895055} = \mathbf{PI}(63, 5, 14, 5, 1, 0)_{37552} \\ \ell_{4169} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{33} \end{bmatrix}_{7755249} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{7725249} = \mathbf{PI}(63, 5, 11, 5, 1, 0)_{36922} \\ \ell_{4164} &= \begin{bmatrix} 1 & 0 & 0 & e^{33} \\ 0 & 1 & 1 & e^{45} \end{bmatrix}_{4795841} = \begin{bmatrix} 1 & 0 & 0 & 56 \\ 0 & 1 & 1 & 38 \end{bmatrix}_{7335354} = \mathbf{PI}(63, 5, 1, 5, 1, 0)_{36922} \\ \ell_{4164$$

$$\ell_{4168} = \begin{bmatrix} 1 & \epsilon^{28} & \epsilon^{52} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13573181} = \begin{bmatrix} 1 & 61 & 50 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13573181} = \mathbf{PI}(0,50,0,61,1,0)_{20080}$$

$$\ell_{4169} = \begin{bmatrix} 1 & \epsilon^{38} & \epsilon^{55} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5009843} = \begin{bmatrix} 1 & 51 & 18 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5009843} = \mathbf{PI}(0,18,0,51,1,0)_{18784}$$

$$\ell_{4170} = \begin{bmatrix} 1 & \epsilon^{6} & \epsilon^{35} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4934945} = \begin{bmatrix} 1 & 33 & 18 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{399071} = \mathbf{PI}(0,18,0,33,1,0)_{16498}$$

$$\ell_{4171} = \begin{bmatrix} 1 & \epsilon^{9} & \epsilon^{18} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3129071} = \begin{bmatrix} 1 & 47 & 11 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3129071} = \mathbf{PI}(0,11,0,47,1,0)_{18269}$$

$$\ell_{4172} = \begin{bmatrix} 1 & \epsilon^{36} & \epsilon^{18} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3083300} = \begin{bmatrix} 1 & 36 & 11 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3093300} = \mathbf{PI}(0,11,0,36,1,0)_{16872}$$

$$\ell_{4173} = \begin{bmatrix} 1 & \epsilon^{35} & \epsilon^{38} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13600562} = \begin{bmatrix} 1 & 188 & 51 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13600562} = \mathbf{PI}(0,51,0,18,1,0)_{14626}$$

$$\ell_{4174} = \begin{bmatrix} 1 & \epsilon^{36} & \epsilon^{38} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1362999} = \begin{bmatrix} 1 & 33 & 51 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13722977} = \mathbf{PI}(0,40,0,52,1,0)_{18933}$$

$$\ell_{4176} = \begin{bmatrix} 1 & \epsilon^{41} & \epsilon^{56} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10772828} = \begin{bmatrix} 1 & 28 & 40 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10772828} = \mathbf{PI}(0,40,0,28,1,0)_{15855}$$

$$\ell_{4176} = \begin{bmatrix} 1 & \epsilon^{52} & \epsilon^{48} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2420770} = \begin{bmatrix} 1 & 50 & 15 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4206770} = \mathbf{PI}(0,15,0,50,1,0)_{16854}$$

$$\ell_{4179} = \begin{bmatrix} 1 & \epsilon^{52} & \epsilon^{48} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4205770} = \begin{bmatrix} 1 & 61 & 15 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4252541} = \mathbf{PI}(0,28,0,52,1,0)_{18921}$$

$$\ell_{4180} = \begin{bmatrix} 1 & \epsilon^{54} & \epsilon^{32} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6994640} = \begin{bmatrix} 1 & 16 & 26 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{6994640} = \mathbf{PI}(0,28,0,52,1,0)_{18921}$$

$$\ell_{4181} = \begin{bmatrix} 1 & \epsilon^{56} & \epsilon^{41} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7677044} = \begin{bmatrix} 1 & 52 & 28 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7677044} = \mathbf{PI}(0,28,0,52,1,0)_{18921}$$

$$\ell_{4183} = \begin{bmatrix} 1 & \epsilon^{56} & \epsilon^{45} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10019687} = \begin{bmatrix} 1 & 39 & 37 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{306403} = \mathbf{PI}(0,28,0,52,1,0)_{12580}$$

$$\ell_{4184} = \begin{bmatrix} 1 & \epsilon^{56} & \epsilon^{45} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9004403} = \begin{bmatrix} 1 & 45 & 23 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{3004403} =$$

$$\begin{split} \ell_{4189} &= \begin{bmatrix} 1 & \epsilon^{32} & \epsilon^{64} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2775386} = \begin{bmatrix} 1 & 26 & 10 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2775386} = \mathbf{PI}(0,10,0,26,1,0)_{15601} \\ \ell_{4190} &= \begin{bmatrix} 1 & \epsilon^{4} & \epsilon^{64} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2733776} = \begin{bmatrix} 1 & 16 & 10 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{2733776} = \mathbf{PI}(0,10,0,16,1,0)_{14331} \\ \ell_{4191} &= \begin{bmatrix} 1 & \epsilon^{2} & \epsilon^{16} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11205572} = \begin{bmatrix} 1 & 4 & 42 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11205572} = \mathbf{PI}(0,42,0,4,1,0)_{12839} \\ \ell_{4192} &= \begin{bmatrix} 1 & \epsilon^{27} & \epsilon^{16} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11380334} = \begin{bmatrix} 1 & 46 & 42 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{11380334} = \mathbf{PI}(0,42,0,46,1,0)_{18173} \\ \ell_{4193} &= \begin{bmatrix} 1 & \epsilon^{12} & \epsilon^{7} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9882782} = \begin{bmatrix} 1 & 62 & 35 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9882782} = \mathbf{PI}(0,35,0,62,1,0)_{20198} \\ \ell_{4194} &= \begin{bmatrix} 1 & \epsilon^{13} & \epsilon^{7} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9445469} = \begin{bmatrix} 1 & 29 & 35 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9445469} = \mathbf{PI}(0,2,0,37,1,0)_{16007} \\ \ell_{4195} &= \begin{bmatrix} 1 & \epsilon^{45} & \epsilon & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9690275} = \begin{bmatrix} 1 & 37 & 2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9690275} = \mathbf{PI}(0,2,0,37,1,0)_{16090} \\ \ell_{4197} &= \begin{bmatrix} 1 & \epsilon^{8} & \epsilon & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9786671} = \begin{bmatrix} 1 & 47 & 36 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9786671} = \mathbf{PI}(0,36,0,47,1,0)_{18294} \\ \ell_{4198} &= \begin{bmatrix} 1 & \epsilon^{18} & \epsilon^{36} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9638875} = \begin{bmatrix} 1 & 11 & 36 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{9638875} = \mathbf{PI}(0,36,0,47,1,0)_{18294} \\ \ell_{4200} &= \begin{bmatrix} 1 & \epsilon^{41} & \epsilon^{33} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13098378} = \begin{bmatrix} 1 & 40 & 52 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13098378} = \mathbf{PI}(0,52,0,40,1,0)_{17421} \\ \ell_{4200} &= \begin{bmatrix} 1 & \epsilon^{45} & \epsilon^{8} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13098378} = \begin{bmatrix} 1 & 23 & 9 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13998378} = \mathbf{PI}(0,39,0,2,1,0)_{15907} \\ \ell_{4201} &= \begin{bmatrix} 1 & \epsilon^{45} & \epsilon^{8} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10543973} = \begin{bmatrix} 1 & 37 & 39 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{13958378} = \mathbf{PI}(0,80,0,2,1,0)_{15907} \\ \ell_{4202} &= \begin{bmatrix} 1 & \epsilon^{45} & \epsilon^{8} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16351119} = \begin{bmatrix} 1 & 15 & 61 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{10543973} = \mathbf{PI}(0,61,0,15,1,0)_{16097} \\ \ell_{4204} &= \begin{bmatrix} 1 & \epsilon^{45} & \epsilon^{8} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16351119} = \begin{bmatrix} 1 & 15 & 61 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{16351119} = \mathbf{PI}(0,61,0,50,1,0)_{16097}$$

$$\begin{split} \ell_{4210} &= \begin{bmatrix} 1 & \epsilon^7 & \epsilon^{13} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7872611} = \begin{bmatrix} 1 & 35 & 29 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{7872611} = \mathbf{Pl}(0, 29, 0, 35, 1, 0)_{16763} \\ \ell_{4211} &= \begin{bmatrix} 1 & \epsilon^{16} & \epsilon^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12428906} = \begin{bmatrix} 1 & 42 & 46 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12428906} = \mathbf{Pl}(0, 46, 0, 42, 1, 0)_{17669} \\ \ell_{4212} &= \begin{bmatrix} 1 & \epsilon^2 & \epsilon^{27} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12270788} = \begin{bmatrix} 1 & 4 & 46 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{12270788} = \mathbf{Pl}(0, 46, 0, 41, 0)_{12843} \\ \ell_{4213} &= \begin{bmatrix} 1 & \epsilon^{19} & \epsilon^{49} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8084822} = \begin{bmatrix} 1 & 22 & 30 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8084822} = \mathbf{Pl}(0, 30, 0, 22, 1, 0)_{15113} \\ \ell_{4214} &= \begin{bmatrix} 1 & \epsilon^3 & \epsilon^{49} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8026568} = \begin{bmatrix} 1 & 8 & 30 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{8026568} = \mathbf{Pl}(0, 30, 0, 81, 0)_{13335} \\ \ell_{4215} &= \begin{bmatrix} 1 & \epsilon^{49} & \epsilon^{19} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5987678} = \begin{bmatrix} 1 & 30 & 22 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{5987678} = \mathbf{Pl}(0, 22, 0, 30, 1, 0)_{16121} \\ \ell_{4216} &= \begin{bmatrix} 1 & \epsilon^3 & \epsilon^{19} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17047225} = \begin{bmatrix} 0 & 1 & 57 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17047225} = \mathbf{Pl}(0, 57, 0, 1, 0, 0)_{249} \\ \ell_{4218} &= \begin{bmatrix} 0 & 1 & \epsilon^{21} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17047160} = \begin{bmatrix} 0 & 1 & 56 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{17047125} = \mathbf{Pl}(0, 56, 0, 1, 0, 0)_{248} \\ \ell_{4219} &= \begin{bmatrix} 1 & \epsilon^{16} & \epsilon^2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1244138} = \begin{bmatrix} 1 & 42 & 4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{1244138} = \mathbf{Pl}(0, 4, 0, 42, 1, 0)_{17627} \\ \ell_{4220} &= \begin{bmatrix} 1 & \epsilon^{27} & \epsilon^2 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4306634} = \begin{bmatrix} 1 & 46 & 4 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4306634} = \mathbf{Pl}(0, 16, 0, 10, 1, 0)_{13575} \\ \ell_{4222} &= \begin{bmatrix} 1 & \epsilon^{24} & \epsilon^{44} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{4373210} = \begin{bmatrix} 1 & 26 & 16 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15545495} = \mathbf{Pl}(0, 58, 0, 45, 1, 0)_{18062} \\ \ell_{4224} &= \begin{bmatrix} 1 & \epsilon^{24} & \epsilon^{14} & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15637037} = \begin{bmatrix} 1 & 45 & 58 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}_{15637037} = \mathbf{Pl}(0, 58, 0, 45, 1, 0)_{18062} \end{aligned}$$

Rank of lines: (1, 4160, 65, 3073, 2049, 1537, 4033, 1025, 2881, 769, 1729, 3009, 2369, 513, 1665, 2433, 1345, 385, 2817, 3905, 1793, 2497, 961, 2177, 2625, 257, 3969, 833, 577, 1217, 3841, 3713, 3201, 193, 3137, 1409, 2561, 2945, 705, 897, 1281, 2241, 1473, 3521, 3393, 1089, 449, 2305, 641, 129, ...4373210, 15545495, 15637037)

Rank of points on Klein quadric: (3,4225,4353,4481,4609,4737,4865,4993,5121,5249,5377,5505,5633,5761,5889,6017,6145,6273,6401,6529,6657,6785,6913,7041,7169,7297,7425,7553,7681,7809,7937,8065,8193,8321,8449,8577,8705,8833,8961,9089,9217,9345,9473,9601,9729,9857,9985,10113,10241,10369,...15607,15268,18062)

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 0 Double points: The double points on the surface are:

Single Points

The surface has 4096 single points: Too many to print.

Points on surface but on no line

The surface has 0 points not on any line: The points on the surface but not on lines are:

Line Intersection Graph

Too many lines to print.

Neighbor sets in the line intersection graph:
Too many lines to print.
The surface has 8257 points:
Too many to print.