# Rank-74106 over GF(16)

## January 15, 2021

# The equation

The equation of the surface is:

$$X_0^3 + X_1^3 + X_2^3 + X_0^2 X_1 + X_0^2 X_2 + X_0^2 X_3 + X_1^2 X_2 + X_0 X_3^2 + X_0 X_1 X_2 = 0$$

( 1, 1, 1, 0, 1, 1, 1, 0, 1, 0, 0, 0, 0, 1, 0, 0, 1, 0, 0, 0 ) The point rank of the equation over  $\mathrm{GF}(16)$  is 304222758

## General information

| Number of lines            | 0         |
|----------------------------|-----------|
| Number of points           | 225       |
| Number of singular points  | 0         |
| Number of Eckardt points   | 0         |
| Number of double points    | 0         |
| Number of single points    | 0         |
| Number of points off lines | 225       |
| Number of Hesse planes     | 0         |
| Number of axes             | 0         |
| Type of points on lines    |           |
| Type of lines on points    | $0^{225}$ |

## Singular Points

The surface has 0 singular points:

## The 0 Lines

The lines and their Pluecker coordinates are:

Rank of lines: ()

Rank of points on Klein quadric: ()

#### **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 0 single points: The single points on the surface are:

The single points on the surface are:

#### Points on surface but on no line

The surface has 225 points not on any line: The points on the surface but not on lines are:

```
0: P_3 = (0,0,0,1)
                                                                  27: P_{893} = (12, 6, 2, 1)
1: P_{284} = (10, 0, 0, 1)
                                                                  28: P_{899} = (2,7,2,1)
                                                                  29: P_{936} = (7, 9, 2, 1)
2: P_{285} = (11, 0, 0, 1)
3: P_{327} = (5, 3, 0, 1)
                                                                  30: P_{947} = (2, 10, 2, 1)
4: P_{331} = (9, 3, 0, 1)
                                                                  31: P_{1020} = (11, 14, 2, 1)
5: P_{336} = (14, 3, 0, 1)
                                                                  32: P_{1027} = (2, 15, 2, 1)
6: P_{356} = (2, 5, 0, 1)
                                                                  33: P_{1029} = (4, 15, 2, 1)
7: P_{362} = (8, 5, 0, 1)
                                                                  34: P_{1035} = (10, 15, 2, 1)
8: P_{368} = (14, 5, 0, 1)
                                                                  35: P_{1046} = (5,0,3,1)
9: P_{384} = (14, 6, 0, 1)
                                                                  36: P_{1050} = (9,0,3,1)
10: P_{390} = (4,7,0,1)
                                                                  37: P_{1055} = (14, 0, 3, 1)
11: P_{404} = (2, 8, 0, 1)
                                                                  38: P_{1093} = (4, 3, 3, 1)
12: P_{406} = (4, 8, 0, 1)
                                                                  39: P_{1126} = (5, 5, 3, 1)
13: P_{417} = (15, 8, 0, 1)
                                                                  40: P_{1134} = (13, 5, 3, 1)
14: P_{440} = (6, 10, 0, 1)
                                                                  41: P_{1136} = (15, 5, 3, 1)
15: P_{441} = (7, 10, 0, 1)
                                                                  42: P_{1142} = (5, 6, 3, 1)
16: P_{444} = (10, 10, 0, 1)
                                                                  43: P_{1194} = (9, 9, 3, 1)
17: P_{461} = (11, 11, 0, 1)
                                                                  44: P_{1210} = (9, 10, 3, 1)
18: P_{462} = (12, 11, 0, 1)
                                                                  45: P_{1229} = (12, 11, 3, 1)
19: P_{463} = (13, 11, 0, 1)
                                                                  46: P_{1236} = (3, 12, 3, 1)
20: P_{475} = (9, 12, 0, 1)
                                                                  47: P_{1259} = (10, 13, 3, 1)
21: P_{484} = (2, 13, 0, 1)
                                                                  48: P_{1260} = (11, 13, 3, 1)
22: P_{517} = (3, 15, 0, 1)
                                                                  49: P_{1263} = (14, 13, 3, 1)
23 : P_{518} = (4, 15, 0, 1)
                                                                  50: P_{1279} = (14, 14, 3, 1)
24: P_{523} = (9, 15, 0, 1)
                                                                  51: P_{1339} = (10, 2, 4, 1)
25: P_{858} = (9, 4, 2, 1)
                                                                  52: P_{1349} = (4, 3, 4, 1)
26: P_{873} = (8, 5, 2, 1)
                                                                  53: P_{1354} = (9, 3, 4, 1)
```

```
54: P_{1356} = (11, 3, 4, 1)
                                                                 108: P_{2316} = (11, 15, 7, 1)
55: P_{1440} = (15, 8, 4, 1)
                                                                 109: P_{2323} = (2,0,8,1)
                                                                 110: P_{2325} = (4, 0, 8, 1)
56: P_{1455} = (14, 9, 4, 1)
                                                                 111: P_{2336} = (15, 0, 8, 1)
57: P_{1477} = (4, 11, 4, 1)
58: P_{1493} = (4, 12, 4, 1)
                                                                 112: P_{2355} = (2, 2, 8, 1)
59: P_{1511} = (6, 13, 4, 1)
                                                                 113: P_{2389} = (4, 4, 8, 1)
60: P_{1533} = (12, 14, 4, 1)
                                                                 114: P_{2448} = (15, 7, 8, 1)
61: P_{1555} = (2,0,5,1)
                                                                 115: P_{2463} = (14, 8, 8, 1)
62: P_{1561} = (8, 0, 5, 1)
                                                                 116: P_{2483} = (2, 10, 8, 1)
63: P_{1567} = (14, 0, 5, 1)
                                                                 117: P_{2510} = (13, 11, 8, 1)
64: P_{1587} = (2, 2, 5, 1)
                                                                 118: P_{2517} = (4, 12, 8, 1)
65: P_{1642} = (9, 5, 5, 1)
                                                                 119: P_{2523} = (10, 12, 8, 1)
66: P_{1654} = (5, 6, 5, 1)
                                                                 120: P_{2524} = (11, 12, 8, 1)
67: P_{1667} = (2,7,5,1)
                                                                 121: P_{2537} = (8, 13, 8, 1)
                                                                 122: P_{2566} = (5, 15, 8, 1)
68: P_{1675} = (10, 7, 5, 1)
69: P_{1676} = (11, 7, 5, 1)
                                                                 123: P_{2573} = (12, 15, 8, 1)
                                                                 124: P_{2576} = (15, 15, 8, 1)
70: P_{1684} = (3, 8, 5, 1)
                                                                 125: P_{2615} = (6, 2, 9, 1)
71: P_{1688} = (7, 8, 5, 1)
                                                                 126: P_{2652} = (11, 4, 9, 1)
72: P_{1689} = (8, 8, 5, 1)
73: P_{1719} = (6, 10, 5, 1)
                                                                 127: P_{2666} = (9, 5, 9, 1)
74: P_{1743} = (14, 11, 5, 1)
                                                                 128: P_{2667} = (10, 5, 9, 1)
75: P_{1769} = (8, 13, 5, 1)
                                                                 129: P_{2671} = (14, 5, 9, 1)
                                                                 130: P_{2682} = (9, 6, 9, 1)
76: P_{1791} = (14, 14, 5, 1)
77: P_{1823} = (14, 0, 6, 1)
                                                                 131: P_{2702} = (13, 7, 9, 1)
78: P_{1900} = (11, 5, 6, 1)
                                                                 132: P_{2746} = (9, 10, 9, 1)
79: P_{1910} = (5, 6, 6, 1)
                                                                 133: P_{2803} = (2, 14, 9, 1)
                                                                 134: P_{2820} = (3, 15, 9, 1)
80: P_{1914} = (9, 6, 6, 1)
81: P_{1918} = (13, 6, 6, 1)
                                                                 135: P_{2839} = (6, 0, 10, 1)
82: P_{1941} = (4, 8, 6, 1)
                                                                 136: P_{2840} = (7, 0, 10, 1)
83: P_{1942} = (5, 8, 6, 1)
                                                                 137: P_{2843} = (10, 0, 10, 1)
84: P_{1951} = (14, 8, 6, 1)
                                                                 138: P_{2870} = (5, 2, 10, 1)
85: P_{1972} = (3, 10, 6, 1)
                                                                 139: P_{2894} = (13, 3, 10, 1)
86: P_{1994} = (9, 11, 6, 1)
                                                                 140: P_{2899} = (2, 4, 10, 1)
87: P_{2003} = (2, 12, 6, 1)
                                                                 141: P_{2935} = (6, 6, 10, 1)
                                                                 142: P_{2952} = (7, 7, 10, 1)
88: P_{2007} = (6, 12, 6, 1)
89: P_{2016} = (15, 12, 6, 1)
                                                                 143: P_{2973} = (12, 8, 10, 1)
90: P_{2043} = (10, 14, 6, 1)
                                                                 144: P_{2992} = (15, 9, 10, 1)
                                                                 145: P_{2995} = (2, 10, 10, 1)
91: P_{2046} = (13, 14, 6, 1)
92: P_{2047} = (14, 14, 6, 1)
                                                                 146: P_{3002} = (9, 10, 10, 1)
93: P_{2069} = (4, 0, 7, 1)
                                                                 147: P_{3003} = (10, 10, 10, 1)
94: P_{2117} = (4, 3, 7, 1)
                                                                 148: P_{3031} = (6, 12, 10, 1)
                                                                 149: P_{3048} = (7, 13, 10, 1)
95: P_{2127} = (14, 3, 7, 1)
96: P_{2128} = (15, 3, 7, 1)
                                                                 150: P_{3066} = (9, 14, 10, 1)
                                                                 151: P_{3100} = (11, 0, 11, 1)
97: P_{2133} = (4, 4, 7, 1)
98: P_{2139} = (10, 4, 7, 1)
                                                                 152: P_{3101} = (12, 0, 11, 1)
99: P_{2141} = (12, 4, 7, 1)
                                                                 153: P_{3102} = (13, 0, 11, 1)
100: P_{2179} = (2,7,7,1)
                                                                 154: P_{3135} = (14, 2, 11, 1)
101: P_{2189} = (12, 7, 7, 1)
                                                                 155: P_{3161} = (8, 4, 11, 1)
102: P_{2192} = (15, 7, 7, 1)
                                                                 156: P_{3176} = (7, 5, 11, 1)
103: P_{2233} = (8, 10, 7, 1)
                                                                 157: P_{3198} = (13, 6, 11, 1)
104: P_{2243} = (2, 11, 7, 1)
                                                                 158: P_{3213} = (12, 7, 11, 1)
105: P_{2278} = (5, 13, 7, 1)
                                                                 159: P_{3237} = (4, 9, 11, 1)
106: P_{2280} = (7, 13, 7, 1)
                                                                 160: P_{3269} = (4, 11, 11, 1)
                                                                 161: P_{3276} = (11, 11, 11, 1)
107: P_{2282} = (9, 13, 7, 1)
```

```
162: P_{3279} = (14, 11, 11, 1)
                                                                 194: P_{3817} = (8, 13, 13, 1)
163: P_{3293} = (12, 12, 11, 1)
                                                                 195: P_{3823} = (14, 13, 13, 1)
                                                                 196: P_{3843} = (2, 15, 13, 1)
164: P_{3310} = (13, 13, 11, 1)
165: P_{3316} = (3, 14, 11, 1)
                                                                 197: P_{3849} = (8, 15, 13, 1)
166: P_{3335} = (6, 15, 11, 1)
                                                                 198: P_{3850} = (9, 15, 13, 1)
167: P_{3354} = (9, 0, 12, 1)
                                                                 199: P_{3893} = (4, 2, 14, 1)
168: P_{3403} = (10, 3, 12, 1)
                                                                 200: P_{3910} = (5, 3, 14, 1)
169: P_{3427} = (2, 5, 12, 1)
                                                                 201: P_{3934} = (13, 4, 14, 1)
170: P_{3428} = (3, 5, 12, 1)
                                                                 202: P_{3987} = (2, 8, 14, 1)
171: P_{3434} = (9, 5, 12, 1)
                                                                 203: P_{3996} = (11, 8, 14, 1)
172: P_{3465} = (8, 7, 12, 1)
                                                                 204: P_{3999} = (14, 8, 14, 1)
                                                                 205: P_{4011} = (10, 9, 14, 1)
173: P_{3469} = (12, 7, 12, 1)
174: P_{3471} = (14, 7, 12, 1)
                                                                 206: P_{4047} = (14, 11, 14, 1)
175: P_{3495} = (6, 9, 12, 1)
                                                                 207: P_{4056} = (7, 12, 14, 1)
                                                                 208: P_{4079} = (14, 13, 14, 1)
176: P_{3498} = (9, 9, 12, 1)
177: P_{3500} = (11, 9, 12, 1)
                                                                 209: P_{4116} = (3, 0, 15, 1)
178: P_{3509} = (4, 10, 12, 1)
                                                                 210: P_{4117} = (4, 0, 15, 1)
179: P_{3536} = (15, 11, 12, 1)
                                                                 211: P_{4122} = (9, 0, 15, 1)
                                                                 212: P_{4164} = (3, 3, 15, 1)
180: P_{3540} = (3, 12, 12, 1)
181: P_{3541} = (4, 12, 12, 1)
                                                                 213: P_{4167} = (6, 3, 15, 1)
182: P_{3543} = (6, 12, 12, 1)
                                                                 214: P_{4169} = (8, 3, 15, 1)
183: P_{3603} = (2, 0, 13, 1)
                                                                 215: P_{4181} = (4, 4, 15, 1)
184: P_{3635} = (2, 2, 13, 1)
                                                                 216: P_{4218} = (9, 6, 15, 1)
185: P_{3640} = (7, 2, 13, 1)
                                                                 217: P_{4219} = (10, 6, 15, 1)
186: P_{3644} = (11, 2, 13, 1)
                                                                 218: P_{4220} = (11, 6, 15, 1)
187: P_{3700} = (3, 6, 13, 1)
                                                                 219: P_{4240} = (15, 7, 15, 1)
188 : P_{3701} = (4, 6, 13, 1)
                                                                 220: P_{4266} = (9, 9, 15, 1)
189 : P_{3710} = (13, 6, 13, 1)
                                                                 221: P_{4280} = (7, 10, 15, 1)
                                                                 222: P_{4293} = (4, 11, 15, 1)
190: P_{3739} = (10, 8, 13, 1)
191: P_{3775} = (14, 10, 13, 1)
                                                                 223: P_{4308} = (3, 12, 15, 1)
192: P_{3782} = (5, 11, 13, 1)
                                                                 224: P_{4355} = (2, 15, 15, 1)
193: P_{3816} = (7, 13, 13, 1)
```

### Line Intersection Graph

Neighbor sets in the line intersection graph:

The surface has 225 points:

The points on the surface are:

```
0: P_3 = (0,0,0,1)
                                           12: P_{406} = (4, 8, 0, 1)
                                                                                        24: P_{523} = (9, 15, 0, 1)
1: P_{284} = (10, 0, 0, 1)
                                            13: P_{417} = (15, 8, 0, 1)
                                                                                        25: P_{858} = (9,4,2,1)
                                           14: P_{440} = (6, 10, 0, 1)
                                                                                        26: P_{873} = (8, 5, 2, 1)
2: P_{285} = (11, 0, 0, 1)
3: P_{327} = (5,3,0,1)
                                           15: P_{441} = (7, 10, 0, 1)
                                                                                        27: P_{893} = (12, 6, 2, 1)
4: P_{331} = (9, 3, 0, 1)
                                           16: P_{444} = (10, 10, 0, 1)
                                                                                        28: P_{899} = (2,7,2,1)
5: P_{336} = (14, 3, 0, 1)
                                           17: P_{461} = (11, 11, 0, 1)
                                                                                        29: P_{936} = (7, 9, 2, 1)
6: P_{356} = (2, 5, 0, 1)
                                           18: P_{462} = (12, 11, 0, 1)
                                                                                        30: P_{947} = (2, 10, 2, 1)
                                            19: P_{463} = (13, 11, 0, 1)
                                                                                        31: P_{1020} = (11, 14, 2, 1)
7: P_{362} = (8, 5, 0, 1)
8: P_{368} = (14, 5, 0, 1)
                                            20: P_{475} = (9, 12, 0, 1)
                                                                                        32: P_{1027} = (2, 15, 2, 1)
                                            21: P_{484} = (2, 13, 0, 1)
9: P_{384} = (14, 6, 0, 1)
                                                                                        33: P_{1029} = (4, 15, 2, 1)
10: P_{390} = (4,7,0,1)
                                           22: P_{517} = (3, 15, 0, 1)
                                                                                        34: P_{1035} = (10, 15, 2, 1)
11: P_{404} = (2, 8, 0, 1)
                                           23: P_{518} = (4, 15, 0, 1)
                                                                                        35: P_{1046} = (5,0,3,1)
```

```
36: P_{1050} = (9, 0, 3, 1)
                                            90: P_{2043} = (10, 14, 6, 1)
                                                                                       144: P_{2992} = (15, 9, 10, 1)
37: P_{1055} = (14, 0, 3, 1)
                                            91: P_{2046} = (13, 14, 6, 1)
                                                                                       145: P_{2995} = (2, 10, 10, 1)
                                                                                        146: P_{3002} = (9, 10, 10, 1)
38: P_{1093} = (4, 3, 3, 1)
                                            92: P_{2047} = (14, 14, 6, 1)
39: P_{1126} = (5, 5, 3, 1)
                                           93: P_{2069} = (4, 0, 7, 1)
                                                                                       147: P_{3003} = (10, 10, 10, 1)
                                           94: P_{2117} = (4, 3, 7, 1)
                                                                                       148: P_{3031} = (6, 12, 10, 1)
40: P_{1134} = (13, 5, 3, 1)
                                           95: P_{2127} = (14, 3, 7, 1)
41: P_{1136} = (15, 5, 3, 1)
                                                                                       149: P_{3048} = (7, 13, 10, 1)
42: P_{1142} = (5, 6, 3, 1)
                                            96: P_{2128} = (15, 3, 7, 1)
                                                                                       150: P_{3066} = (9, 14, 10, 1)
43: P_{1194} = (9, 9, 3, 1)
                                            97: P_{2133} = (4, 4, 7, 1)
                                                                                       151: P_{3100} = (11, 0, 11, 1)
44: P_{1210} = (9, 10, 3, 1)
                                           98: P_{2139} = (10, 4, 7, 1)
                                                                                       152: P_{3101} = (12, 0, 11, 1)
45: P_{1229} = (12, 11, 3, 1)
                                            99: P_{2141} = (12, 4, 7, 1)
                                                                                        153: P_{3102} = (13, 0, 11, 1)
46: P_{1236} = (3, 12, 3, 1)
                                           100: P_{2179} = (2,7,7,1)
                                                                                       154: P_{3135} = (14, 2, 11, 1)
47: P_{1259} = (10, 13, 3, 1)
                                           101: P_{2189} = (12, 7, 7, 1)
                                                                                       155: P_{3161} = (8, 4, 11, 1)
48: P_{1260} = (11, 13, 3, 1)
                                           102: P_{2192} = (15, 7, 7, 1)
                                                                                       156: P_{3176} = (7, 5, 11, 1)
49: P_{1263} = (14, 13, 3, 1)
                                           103: P_{2233} = (8, 10, 7, 1)
                                                                                       157: P_{3198} = (13, 6, 11, 1)
                                           104: P_{2243} = (2, 11, 7, 1)
                                                                                       158: P_{3213} = (12, 7, 11, 1)
50: P_{1279} = (14, 14, 3, 1)
51: P_{1339} = (10, 2, 4, 1)
                                           105: P_{2278} = (5, 13, 7, 1)
                                                                                       159: P_{3237} = (4, 9, 11, 1)
52: P_{1349} = (4, 3, 4, 1)
                                           106: P_{2280} = (7, 13, 7, 1)
                                                                                       160: P_{3269} = (4, 11, 11, 1)
                                           107: P_{2282} = (9, 13, 7, 1)
                                                                                       161: P_{3276} = (11, 11, 11, 1)
53: P_{1354} = (9, 3, 4, 1)
                                           108: P_{2316} = (11, 15, 7, 1)
                                                                                       162: P_{3279} = (14, 11, 11, 1)
54: P_{1356} = (11, 3, 4, 1)
55: P_{1440} = (15, 8, 4, 1)
                                           109: P_{2323} = (2,0,8,1)
                                                                                       163: P_{3293} = (12, 12, 11, 1)
56: P_{1455} = (14, 9, 4, 1)
                                           110: P_{2325} = (4, 0, 8, 1)
                                                                                       164: P_{3310} = (13, 13, 11, 1)
                                                                                       165: P_{3316} = (3, 14, 11, 1)
57: P_{1477} = (4, 11, 4, 1)
                                           111: P_{2336} = (15, 0, 8, 1)
                                           112: P_{2355} = (2, 2, 8, 1)
                                                                                       166: P_{3335} = (6, 15, 11, 1)
58: P_{1493} = (4, 12, 4, 1)
59: P_{1511} = (6, 13, 4, 1)
                                           113: P_{2389} = (4, 4, 8, 1)
                                                                                       167: P_{3354} = (9, 0, 12, 1)
60: P_{1533} = (12, 14, 4, 1)
                                           114: P_{2448} = (15, 7, 8, 1)
                                                                                        168: P_{3403} = (10, 3, 12, 1)
61: P_{1555} = (2,0,5,1)
                                           115: P_{2463} = (14, 8, 8, 1)
                                                                                       169: P_{3427} = (2, 5, 12, 1)
                                                                                       170: P_{3428} = (3, 5, 12, 1)
62: P_{1561} = (8, 0, 5, 1)
                                           116: P_{2483} = (2, 10, 8, 1)
63: P_{1567} = (14, 0, 5, 1)
                                           117: P_{2510} = (13, 11, 8, 1)
                                                                                       171: P_{3434} = (9, 5, 12, 1)
                                                                                       172: P_{3465} = (8, 7, 12, 1)
64: P_{1587} = (2, 2, 5, 1)
                                           118: P_{2517} = (4, 12, 8, 1)
65: P_{1642} = (9, 5, 5, 1)
                                           119: P_{2523} = (10, 12, 8, 1)
                                                                                       173: P_{3469} = (12, 7, 12, 1)
66: P_{1654} = (5, 6, 5, 1)
                                           120: P_{2524} = (11, 12, 8, 1)
                                                                                       174: P_{3471} = (14, 7, 12, 1)
67: P_{1667} = (2, 7, 5, 1)
                                           121: P_{2537} = (8, 13, 8, 1)
                                                                                       175: P_{3495} = (6, 9, 12, 1)
68: P_{1675} = (10, 7, 5, 1)
                                           122: P_{2566} = (5, 15, 8, 1)
                                                                                       176: P_{3498} = (9, 9, 12, 1)
                                           123: P_{2573} = (12, 15, 8, 1)
                                                                                       177: P_{3500} = (11, 9, 12, 1)
69: P_{1676} = (11, 7, 5, 1)
70: P_{1684} = (3, 8, 5, 1)
                                           124: P_{2576} = (15, 15, 8, 1)
                                                                                       178: P_{3509} = (4, 10, 12, 1)
                                           125: P_{2615} = (6, 2, 9, 1)
                                                                                       179: P_{3536} = (15, 11, 12, 1)
71: P_{1688} = (7, 8, 5, 1)
72: P_{1689} = (8, 8, 5, 1)
                                           126: P_{2652} = (11, 4, 9, 1)
                                                                                       180: P_{3540} = (3, 12, 12, 1)
                                           127: P_{2666} = (9, 5, 9, 1)
                                                                                       181: P_{3541} = (4, 12, 12, 1)
73: P_{1719} = (6, 10, 5, 1)
74: P_{1743} = (14, 11, 5, 1)
                                           128: P_{2667} = (10, 5, 9, 1)
                                                                                       182: P_{3543} = (6, 12, 12, 1)
75: P_{1769} = (8, 13, 5, 1)
                                           129: P_{2671} = (14, 5, 9, 1)
                                                                                       183: P_{3603} = (2, 0, 13, 1)
76: P_{1791} = (14, 14, 5, 1)
                                            130: P_{2682} = (9, 6, 9, 1)
                                                                                       184: P_{3635} = (2, 2, 13, 1)
                                           131: P_{2702} = (13, 7, 9, 1)
                                                                                       185: P_{3640} = (7, 2, 13, 1)
77: P_{1823} = (14, 0, 6, 1)
78: P_{1900} = (11, 5, 6, 1)
                                           132: P_{2746} = (9, 10, 9, 1)
                                                                                       186: P_{3644} = (11, 2, 13, 1)
79: P_{1910} = (5, 6, 6, 1)
                                           133: P_{2803} = (2, 14, 9, 1)
                                                                                       187: P_{3700} = (3, 6, 13, 1)
80: P_{1914} = (9, 6, 6, 1)
                                           134: P_{2820} = (3, 15, 9, 1)
                                                                                       188: P_{3701} = (4, 6, 13, 1)
                                           135: P_{2839} = (6, 0, 10, 1)
                                                                                       189: P_{3710} = (13, 6, 13, 1)
81: P_{1918} = (13, 6, 6, 1)
82: P_{1941} = (4, 8, 6, 1)
                                           136: P_{2840} = (7, 0, 10, 1)
                                                                                       190: P_{3739} = (10, 8, 13, 1)
83: P_{1942} = (5, 8, 6, 1)
                                           137: P_{2843} = (10, 0, 10, 1)
                                                                                        191: P_{3775} = (14, 10, 13, 1)
                                                                                       192: P_{3782} = (5, 11, 13, 1)
84: P_{1951} = (14, 8, 6, 1)
                                           138: P_{2870} = (5, 2, 10, 1)
85: P_{1972} = (3, 10, 6, 1)
                                           139: P_{2894} = (13, 3, 10, 1)
                                                                                       193: P_{3816} = (7, 13, 13, 1)
86: P_{1994} = (9, 11, 6, 1)
                                           140: P_{2899} = (2, 4, 10, 1)
                                                                                       194: P_{3817} = (8, 13, 13, 1)
87: P_{2003} = (2, 12, 6, 1)
                                           141: P_{2935} = (6, 6, 10, 1)
                                                                                       195: P_{3823} = (14, 13, 13, 1)
88: P_{2007} = (6, 12, 6, 1)
                                           142: P_{2952} = (7, 7, 10, 1)
                                                                                       196: P_{3843} = (2, 15, 13, 1)
89: P_{2016} = (15, 12, 6, 1)
                                           143: P_{2973} = (12, 8, 10, 1)
                                                                                       197: P_{3849} = (8, 15, 13, 1)
```

```
218: P_{4220} = (11, 6, 15, 1)
198: P_{3850} = (9, 15, 13, 1)
                                           208: P_{4079} = (14, 13, 14, 1)
199: P_{3893} = (4, 2, 14, 1)
                                           209: P_{4116} = (3, 0, 15, 1)
                                                                                      219: P_{4240} = (15, 7, 15, 1)
                                                                                      220: P_{4266} = (9, 9, 15, 1)
200: P_{3910} = (5, 3, 14, 1)
                                           210: P_{4117} = (4, 0, 15, 1)
201: P_{3934} = (13, 4, 14, 1)
                                           211: P_{4122} = (9, 0, 15, 1)
                                                                                      221: P_{4280} = (7, 10, 15, 1)
202: P_{3987} = (2, 8, 14, 1)
                                           212: P_{4164} = (3, 3, 15, 1)
                                                                                      222: P_{4293} = (4, 11, 15, 1)
203: P_{3996} = (11, 8, 14, 1)
                                           213: P_{4167} = (6, 3, 15, 1)
                                                                                      223: P_{4308} = (3, 12, 15, 1)
204: P_{3999} = (14, 8, 14, 1)
                                           214: P_{4169} = (8, 3, 15, 1)
                                                                                      224: P_{4355} = (2, 15, 15, 1)
205: P_{4011} = (10, 9, 14, 1)
                                           215: P_{4181} = (4, 4, 15, 1)
206: P_{4047} = (14, 11, 14, 1)
                                           216: P_{4218} = (9, 6, 15, 1)
                                           217: P_{4219} = (10, 6, 15, 1)
207: P_{4056} = (7, 12, 14, 1)
```