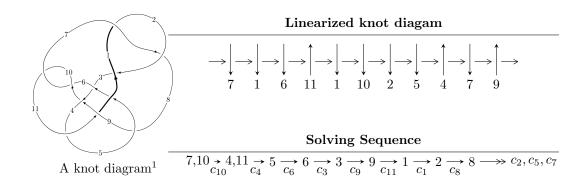
# $11n_{147} (K11n_{147})$



#### Ideals for irreducible components<sup>2</sup> of $X_{par}$

$$\begin{split} I_1^u &= \langle 1.98756 \times 10^{46} u^{32} + 1.28266 \times 10^{46} u^{31} + \dots + 1.35435 \times 10^{47} b + 2.77751 \times 10^{46}, \\ &2.97484 \times 10^{47} u^{32} + 3.19635 \times 10^{47} u^{31} + \dots + 1.35435 \times 10^{47} a + 4.86114 \times 10^{48}, \ u^{33} + u^{32} + \dots + 14u + 1 \\ I_2^u &= \langle u^{14} - 3u^{12} - u^{11} + u^{10} + 2u^9 + 7u^8 - 4u^7 - 11u^6 + 4u^5 + 6u^4 - 5u^3 - u^2 + b, \\ &- 73u^{14} + 113u^{13} + \dots + 19a + 238, \\ &u^{15} - 4u^{13} - u^{12} + 4u^{11} + 3u^{10} + 6u^9 - 6u^8 - 18u^7 + 8u^6 + 17u^5 - 9u^4 - 7u^3 + 5u^2 + u - 1 \rangle \end{split}$$

\* 2 irreducible components of  $\dim_{\mathbb{C}} = 0$ , with total 48 representations.

<sup>&</sup>lt;sup>1</sup>The image of knot diagram is generated by the software "**Draw programme**" developed by Andrew Bartholomew(http://www.layer8.co.uk/maths/draw/index.htm#Running-draw), where we modified some parts for our purpose(https://github.com/CATsTAILs/LinksPainter).

<sup>&</sup>lt;sup>2</sup> All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

 $I. \\ I_1^u = \langle 1.99 \times 10^{46} u^{32} + 1.28 \times 10^{46} u^{31} + \dots + 1.35 \times 10^{47} b + 2.78 \times 10^{46}, \ 2.97 \times 10^{47} u^{32} + 3.20 \times 10^{47} u^{31} + \dots + 1.35 \times 10^{47} a + 4.86 \times 10^{48}, \ u^{33} + u^{32} + \dots + 14u + 1 \rangle$ 

(i) Arc colorings

$$a_{7} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} -2.19651u^{32} - 2.36006u^{31} + \dots - 288.611u - 35.8928 \\ -0.146754u^{32} - 0.0947065u^{31} + \dots - 10.0032u - 0.205081 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

$$a_{5} = \begin{pmatrix} -2.39829u^{32} - 2.50756u^{31} + \dots - 303.100u - 36.2614 \\ -0.153523u^{32} - 0.103389u^{31} + \dots - 10.5613u - 0.259363 \end{pmatrix}$$

$$a_{6} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{3} = \begin{pmatrix} -2.25912u^{32} - 2.42484u^{31} + \dots - 293.679u - 36.1084 \\ -0.209360u^{32} - 0.159488u^{31} + \dots - 15.0713u - 0.420679 \end{pmatrix}$$

$$a_{9} = \begin{pmatrix} 1.41506u^{32} + 1.04966u^{31} + \dots + 69.0722u - 12.5718 \\ -0.0802570u^{32} - 0.116578u^{31} + \dots - 12.6183u - 1.15166 \end{pmatrix}$$

$$a_{1} = \begin{pmatrix} -1.63104u^{32} - 1.63496u^{31} + \dots - 199.736u - 22.5435 \\ -0.0316774u^{32} - 0.0129877u^{31} + \dots - 6.21518u - 0.0761096 \end{pmatrix}$$

$$a_{2} = \begin{pmatrix} -1.63104u^{32} - 1.63496u^{31} + \dots - 199.736u - 22.5435 \\ -0.00657502u^{32} - 0.00502953u^{31} + \dots - 4.52928u - 0.0721915 \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} 2.50333u^{32} + 2.57261u^{31} + \dots + 314.930u + 36.4507 \\ 0.0683064u^{32} + 0.0388114u^{31} + \dots + 8.35580u + 0.120011 \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} 0.0683064u^{32} + 0.0388114u^{31} + \dots + 8.35580u + 0.120011 \end{pmatrix}$$

- (ii) Obstruction class = -1
- (iii) Cusp Shapes =  $1.80265u^{32} + 1.77164u^{31} + \cdots + 131.190u 2.63139$

### (iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
$c_{1}, c_{7}$	$u^{33} - u^{32} + \dots - 377u + 49$
$c_2$	$u^{33} + 51u^{32} + \dots - 6243u + 2401$
$c_3$	$u^{33} + 4u^{32} + \dots + 1014u + 53$
$c_4$	$u^{33} - 3u^{32} + \dots + 143u + 167$
<i>C</i> <sub>5</sub>	$u^{33} - 31u^{31} + \dots + 31219u + 7513$
$c_6,c_{10}$	$u^{33} + u^{32} + \dots + 14u + 1$
<i>c</i> <sub>8</sub>	$u^{33} + 3u^{32} + \dots + 43957u + 23657$
<i>c</i> 9	$u^{33} + u^{32} + \dots - 194u + 69$
$c_{11}$	$u^{33} + 2u^{32} + \dots + 12u + 1$

## (v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
$c_1, c_7$	$y^{33} - 51y^{32} + \dots - 6243y - 2401$
$c_2$	$y^{33} - 127y^{32} + \dots - 823598607y - 5764801$
$c_3$	$y^{33} - 62y^{32} + \dots + 1267120y - 2809$
$c_4$	$y^{33} + 13y^{32} + \dots + 203815y - 27889$
<i>C</i> <sub>5</sub>	$y^{33} - 62y^{32} + \dots - 187379697y - 56445169$
$c_6, c_{10}$	$y^{33} - 31y^{32} + \dots - 58y - 1$
<i>c</i> <sub>8</sub>	$y^{33} - 35y^{32} + \dots + 2107894731y - 559653649$
$c_9$	$y^{33} + 13y^{32} + \dots - 3488y - 4761$
$c_{11}$	$y^{33} + 4y^{32} + \dots + 94y - 1$

# (vi) Complex Volumes and Cusp Shapes

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 1.127190 + 0.291980I		
a = 0.90634 + 1.24177I	-4.91531 - 2.57543I	-14.7490 + 3.5042I
b = -0.280294 + 0.848945I		
u = 1.127190 - 0.291980I		
a = 0.90634 - 1.24177I	-4.91531 + 2.57543I	-14.7490 - 3.5042I
b = -0.280294 - 0.848945I		
u = -0.258449 + 1.156160I		
a = 0.118269 + 0.247166I	2.26695 + 2.07000I	4.04253 + 2.66758I
b = 0.381205 - 0.236102I		
u = -0.258449 - 1.156160I		
a = 0.118269 - 0.247166I	2.26695 - 2.07000I	4.04253 - 2.66758I
b = 0.381205 + 0.236102I		
u = -1.214840 + 0.304735I		
a = -0.676508 + 1.000140I	-2.65106 + 0.57067I	-7.43301 + 1.59468I
b = -0.363295 + 1.180830I		
u = -1.214840 - 0.304735I		
a = -0.676508 - 1.000140I	-2.65106 - 0.57067I	-7.43301 - 1.59468I
b = -0.363295 - 1.180830I		
u = -1.203030 + 0.458288I		
a = -0.26246 + 1.71772I	-4.39762 + 3.59048I	-13.6557 - 4.4501I
b = 1.23330 + 1.31569I		
u = -1.203030 - 0.458288I		
a = -0.26246 - 1.71772I	-4.39762 - 3.59048I	-13.6557 + 4.4501I
b = 1.23330 - 1.31569I		
u = 1.235800 + 0.362699I		
a = -0.03086 + 1.63923I	-1.99613 - 4.92165I	-6.31797 + 5.98553I
b = -0.508343 + 0.929615I		
u = 1.235800 - 0.362699I		
a = -0.03086 - 1.63923I	-1.99613 + 4.92165I	-6.31797 - 5.98553I
b = -0.508343 - 0.929615I		

	Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
•	u = -0.569481		
	a = -0.688600	-1.00066	-10.2820
	b = -0.604199		
•	u = -0.173547 + 0.479626I		
	a = -0.525769 - 0.734371I	-1.45039 + 0.21379I	-8.69019 - 1.03252I
	b = -0.526827 + 0.796028I		
,	u = -0.173547 - 0.479626I		
	a = -0.525769 + 0.734371I	-1.45039 - 0.21379I	-8.69019 + 1.03252I
	b = -0.526827 - 0.796028I		
	u = 0.129625 + 0.488487I		
	a = -0.477469 + 0.473795I	1.34993 + 1.55576I	0.80167 - 1.35691I
	b = 0.889420 + 0.379105I		
	u = 0.129625 - 0.488487I		
	a = -0.477469 - 0.473795I	1.34993 - 1.55576I	0.80167 + 1.35691I
	b = 0.889420 - 0.379105I		
	u = -1.52232 + 0.04381I		
	a = -0.703268 - 0.941307I	-14.5102 - 1.0864I	-12.76434 + 6.06201I
	b = 0.711491 - 0.715800I		
	u = -1.52232 - 0.04381I		
	a = -0.703268 + 0.941307I	-14.5102 + 1.0864I	-12.76434 - 6.06201I
	b = 0.711491 + 0.715800I		
	u = -0.078681 + 0.424703I		
	a = -0.651126 + 0.856956I	0.04954 + 4.46270I	-2.71293 - 8.43854I
,	b = -0.868396 - 0.574824I		
	u = -0.078681 - 0.424703I		
	a = -0.651126 - 0.856956I	0.04954 - 4.46270I	-2.71293 + 8.43854I
	b = -0.868396 + 0.574824I		
	u = 1.59376 + 0.04874I		
	a = -0.476576 - 0.859038I	-15.3428 - 2.1802I	0
	b = -1.93979 - 1.30100I		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 1.59376 - 0.04874I		
a = -0.476576 + 0.859038I	-15.3428 + 2.1802I	0
b = -1.93979 + 1.30100I		
u = 1.62635 + 0.11374I		
a = 0.254364 - 1.108810I	-6.41445 - 6.00796I	0
b = 0.80851 - 1.54572I		
u = 1.62635 - 0.11374I		
a = 0.254364 + 1.108810I	-6.41445 + 6.00796I	0
b = 0.80851 + 1.54572I		
u = -1.65170 + 0.20395I		
a =  0.329105 - 0.879132I	-5.75926 - 1.26707I	0
b = -0.047223 - 1.078280I		
u = -1.65170 - 0.20395I		
a = 0.329105 + 0.879132I	-5.75926 + 1.26707I	0
b = -0.047223 + 1.078280I		
u = 0.17496 + 1.66747I		
a = -0.0254572 - 0.0404340I	-11.57590 - 4.55852I	0
b = 0.312479 - 1.241810I		
u = 0.17496 - 1.66747I		
a = -0.0254572 + 0.0404340I	-11.57590 + 4.55852I	0
b = 0.312479 + 1.241810I		
u = -1.65356 + 0.67060I		
a = 0.202508 - 1.183540I	-17.3332 + 12.6517I	0
b = -1.06866 - 1.49216I		
u = -1.65356 - 0.67060I		
a = 0.202508 + 1.183540I	-17.3332 - 12.6517I	0
b = -1.06866 + 1.49216I		
u = -0.0667735 + 0.0884449I		
a = -16.3648 - 15.7170I	-9.04777 + 1.61427I	-11.19487 + 6.80933I
b = 0.429817 - 0.686138I		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = -0.0667735 - 0.0884449I		
a = -16.3648 + 15.7170I	-9.04777 - 1.61427I	-11.19487 - 6.80933I
b = 0.429817 + 0.686138I		
u = 1.71996 + 0.81176I		
a = -0.271982 - 0.744516I	-16.3377 - 4.4651I	0
b = 0.638698 - 1.235990I		
u = 1.71996 - 0.81176I		
a = -0.271982 + 0.744516I	-16.3377 + 4.4651I	0
b = 0.638698 + 1.235990I		

II. 
$$I_2^u = \langle u^{14} - 3u^{12} + \dots - u^2 + b, \ -73u^{14} + 113u^{13} + \dots + 19a + 238, \ u^{15} - 4u^{13} + \dots + u - 1 \rangle$$

(i) Arc colorings

$$a_{7} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} 3.84211u^{14} - 5.94737u^{13} + \dots + 24.1053u - 12.5263 \\ -u^{14} + 3u^{12} + \dots + 5u^{3} + u^{2} \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

$$a_{5} = \begin{pmatrix} 0.526316u^{14} - 3.84211u^{13} + \dots + 14.3158u - 6.57895 \\ -3.36842u^{14} + 0.789474u^{13} + \dots - 5.42105u + 2.10526 \end{pmatrix}$$

$$a_{6} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{3} = \begin{pmatrix} 0.526316u^{14} - 3.84211u^{13} + \dots + 13.3158u - 6.57895 \\ -4.31579u^{14} + 2.10526u^{13} + \dots - 10.7895u + 5.94737 \end{pmatrix}$$

$$a_{9} = \begin{pmatrix} -9.31579u^{14} + 4.10526u^{13} + \dots - 29.7895u + 8.94737 \\ -3u^{13} + 10u^{11} + \dots + 4u - 4 \end{pmatrix}$$

$$a_{1} = \begin{pmatrix} -0.526316u^{14} + 3.84211u^{13} + \dots - 9.31579u + 7.57895 \\ -5.47368u^{14} + 8.15789u^{13} + \dots - 28.6842u + 17.4211 \end{pmatrix}$$

$$a_{2} = \begin{pmatrix} -0.526316u^{14} + 3.84211u^{13} + \dots - 9.31579u + 7.57895 \\ -6.42105u^{14} + 9.47368u^{13} + \dots - 33.0526u + 21.2632 \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} 3.94737u^{14} - 4.31579u^{13} + \dots + 14.3684u - 10.8421 \\ 6.57895u^{14} - 10.5263u^{13} + \dots + 36.9474u - 21.7368 \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} 3.94737u^{14} - 4.31579u^{13} + \dots + 14.3684u - 10.8421 \\ 6.57895u^{14} - 10.5263u^{13} + \dots + 36.9474u - 21.7368 \end{pmatrix}$$

#### (ii) Obstruction class = 1

(iii) Cusp Shapes = 
$$-\frac{124}{19}u^{14} + \frac{301}{19}u^{13} + \frac{478}{19}u^{12} - \frac{941}{19}u^{11} - \frac{746}{19}u^{10} + \frac{339}{19}u^9 - \frac{2}{19}u^8 + \frac{2898}{19}u^7 + \frac{696}{19}u^6 - \frac{5366}{19}u^5 - \frac{218}{19}u^4 + \frac{4007}{19}u^3 - \frac{1063}{19}u^2 - \frac{1032}{19}u + \frac{296}{19}u^8 + \frac{296}{19}u^8 - \frac{2}{19}u^8 + \frac{296}{19}u^8 - \frac{2}{19}u^8 + \frac{2}{19}u^8 - \frac{2}{19}u^8 -$$

### (iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing	
$c_1$	$u^{15} - 8u^{13} + \dots - 4u - 1$	
$c_2$	$u^{15} + 16u^{14} + \dots + 18u + 1$	
$c_3$	$u^{15} - 11u^{14} + \dots + 73u - 19$	
$c_4$	$u^{15} - 2u^{13} + \dots - 2u - 1$	
$c_5$	$u^{15} - u^{14} + \dots - 4u - 1$	
$c_6$	$u^{15} - 4u^{13} + \dots + u + 1$	
<i>c</i> <sub>7</sub>	$u^{15} - 8u^{13} + \dots - 4u + 1$	
<i>c</i> <sub>8</sub>	$u^{15} - 2u^{13} + \dots + 2u + 1$	
<i>c</i> <sub>9</sub>	$u^{15} + 2u^{12} + 3u^{10} + 4u^8 + 6u^7 - 6u^6 + 10u^5 + 5u^4 - 2u^3 + 6u^2 - u$	+ 1
$c_{10}$	$u^{15} - 4u^{13} + \dots + u - 1$	
$c_{11}$	$u^{15} - 3u^{14} + \dots + 3u + 1$	

# (v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
$c_1, c_7$	$y^{15} - 16y^{14} + \dots + 18y - 1$
$c_2$	$y^{15} - 24y^{14} + \dots + 2y - 1$
<i>C</i> 3	$y^{15} - 19y^{14} + \dots + 1529y - 361$
C4	$y^{15} - 4y^{14} + \dots - 12y - 1$
<i>C</i> 5	$y^{15} - 7y^{14} + \dots - 8y - 1$
$c_{6}, c_{10}$	$y^{15} - 8y^{14} + \dots + 11y - 1$
C <sub>8</sub>	$y^{15} - 4y^{14} + \dots - 4y - 1$
<i>c</i> 9	$y^{15} - 4y^{12} + \dots - 11y - 1$
$c_{11}$	$y^{15} - y^{14} + \dots + 7y - 1$

# (vi) Complex Volumes and Cusp Shapes

Solutions to $I_2^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = -1.016610 + 0.431054I		
a = -0.855984 + 1.067750I	-3.57736 + 1.80398I	-10.22776 - 1.35849I
b = 0.281730 + 1.208910I		
u = -1.016610 - 0.431054I		
a = -0.855984 - 1.067750I	-3.57736 - 1.80398I	-10.22776 + 1.35849I
b = 0.281730 - 1.208910I		
u = 1.145500 + 0.390052I		
a = -0.03040 + 1.79678I	-2.97120 - 6.42822I	-8.47318 + 7.69759I
b = -0.645353 + 1.166310I		
u = 1.145500 - 0.390052I		
a = -0.03040 - 1.79678I	-2.97120 + 6.42822I	-8.47318 - 7.69759I
b = -0.645353 - 1.166310I		
u = 0.694258 + 0.135962I		
a = -0.274946 + 0.699949I	-0.80659 + 4.08294I	-10.81787 - 3.73998I
b = 1.072130 + 0.630700I		
u = 0.694258 - 0.135962I		
a = -0.274946 - 0.699949I	-0.80659 - 4.08294I	-10.81787 + 3.73998I
b = 1.072130 - 0.630700I		
u = -0.681806 + 0.019577I		
a = -0.553972 - 0.968044I	0.12222 - 1.54750I	-8.44941 + 2.09198I
b = -1.268190 + 0.099774I		
u = -0.681806 - 0.019577I		
a = -0.553972 + 0.968044I	0.12222 + 1.54750I	-8.44941 - 2.09198I
b = -1.268190 - 0.099774I		
u = 0.510989 + 0.449107I		
a = 3.49622 - 0.96709I	-9.05250 - 2.11036I	-11.5344 + 8.6463I
b = 0.250601 + 0.599760I		
u = 0.510989 - 0.449107I		
a = 3.49622 + 0.96709I	-9.05250 + 2.11036I	-11.5344 - 8.6463I
b = 0.250601 - 0.599760I		

Solutions to $I_2^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = -0.149147 + 1.334590I		
a =  0.156974 - 0.043596I	1.95997 + 2.29980I	-12.9306 - 8.8872I
b = 0.015421 + 0.481518I		
u = -0.149147 - 1.334590I		
a = 0.156974 + 0.043596I	1.95997 - 2.29980I	-12.9306 + 8.8872I
b = 0.015421 - 0.481518I		
u = -1.292720 + 0.392522I		
a = -0.131181 + 1.312820I	-3.07019 + 3.17344I	-7.31876 - 2.82917I
b = 0.822319 + 0.854855I		
u = -1.292720 - 0.392522I		
a = -0.131181 - 1.312820I	-3.07019 - 3.17344I	-7.31876 + 2.82917I
b = 0.822319 - 0.854855I		
u = 1.57907		
a = 0.386597	-14.5567	-11.4960
b = -1.05733		

### III. u-Polynomials

Crossings	u-Polynomials at each crossing	
$c_1$	$ (u^{15} - 8u^{13} + \dots - 4u - 1)(u^{33} - u^{32} + \dots - 377u + 49) $	
$c_2$	$(u^{15} + 16u^{14} + \dots + 18u + 1)(u^{33} + 51u^{32} + \dots - 6243u + 2401)$	
<i>c</i> <sub>3</sub>	$(u^{15} - 11u^{14} + \dots + 73u - 19)(u^{33} + 4u^{32} + \dots + 1014u + 53)$	
C <sub>4</sub>	$(u^{15} - 2u^{13} + \dots - 2u - 1)(u^{33} - 3u^{32} + \dots + 143u + 167)$	
<i>C</i> <sub>5</sub>	$(u^{15} - u^{14} + \dots - 4u - 1)(u^{33} - 31u^{31} + \dots + 31219u + 7513)$	
<i>C</i> <sub>6</sub>	$(u^{15} - 4u^{13} + \dots + u + 1)(u^{33} + u^{32} + \dots + 14u + 1)$	
	$(u^{15} - 8u^{13} + \dots - 4u + 1)(u^{33} - u^{32} + \dots - 377u + 49)$	
c <sub>8</sub>	$(u^{15} - 2u^{13} + \dots + 2u + 1)(u^{33} + 3u^{32} + \dots + 43957u + 23657)$	
<i>c</i> <sub>9</sub>	$(u^{15} + 2u^{12} + 3u^{10} + 4u^8 + 6u^7 - 6u^6 + 10u^5 + 5u^4 - 2u^3 + 6u^2 - u + (u^{33} + u^{32} + \dots - 194u + 69)$	+1)
$c_{10}$	$(u^{15} - 4u^{13} + \dots + u - 1)(u^{33} + u^{32} + \dots + 14u + 1)$	
$c_{11}$	$(u^{15} - 3u^{14} + \dots + 3u + 1)(u^{33} + 2u^{32} + \dots + 12u + 1)$	

## IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
$c_1, c_7$	$(y^{15} - 16y^{14} + \dots + 18y - 1)(y^{33} - 51y^{32} + \dots - 6243y - 2401)$
$c_2$	$(y^{15} - 24y^{14} + \dots + 2y - 1)$ $\cdot (y^{33} - 127y^{32} + \dots - 823598607y - 5764801)$
$c_3$	$(y^{15} - 19y^{14} + \dots + 1529y - 361)$ $\cdot (y^{33} - 62y^{32} + \dots + 1267120y - 2809)$
$c_4$	$y^{15} - 4y^{14} + \dots - 12y - 1(y^{33} + 13y^{32} + \dots + 203815y - 27889)$
$c_5$	$(y^{15} - 7y^{14} + \dots - 8y - 1)$ $\cdot (y^{33} - 62y^{32} + \dots - 187379697y - 56445169)$
$c_6, c_{10}$	$(y^{15} - 8y^{14} + \dots + 11y - 1)(y^{33} - 31y^{32} + \dots - 58y - 1)$
$c_8$	$(y^{15} - 4y^{14} + \dots - 4y - 1)$ $\cdot (y^{33} - 35y^{32} + \dots + 2107894731y - 559653649)$
<i>c</i> <sub>9</sub>	$(y^{15} - 4y^{12} + \dots - 11y - 1)(y^{33} + 13y^{32} + \dots - 3488y - 4761)$
$c_{11}$	$(y^{15} - y^{14} + \dots + 7y - 1)(y^{33} + 4y^{32} + \dots + 94y - 1)$