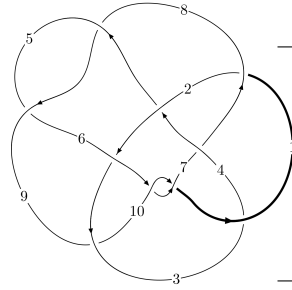
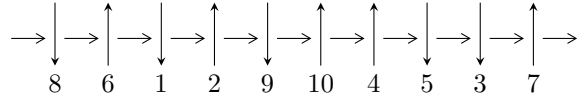


10₁₁₈ (K10a₈₈)



A knot diagram¹

Linearized knot diagram



Solving Sequence

$$4,7 \xrightarrow{c_7} 1,8 \xrightarrow{c_1} 2 \xrightarrow{c_4} 5 \xrightarrow{c_3} 3 \xrightarrow{c_{10}} 10 \xrightarrow{c_6} 6 \xrightarrow{c_9} 9 \longrightarrow c_2, c_5, c_8$$

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 2.17049 \times 10^{128} u^{55} + 7.04965 \times 10^{128} u^{54} + \dots + 1.13515 \times 10^{129} b + 3.31225 \times 10^{128}, \\ - 6.03461 \times 10^{129} u^{55} - 1.05486 \times 10^{130} u^{54} + \dots + 3.29192 \times 10^{130} a + 8.03066 \times 10^{131}, \\ u^{56} + 3u^{55} + \dots - 86u - 29 \rangle$$

$$I_2^u = \langle u^7 - u^5 + 2u^4 + 2u^3 + 3u^2 + 2b - 1, 2u^7 - u^6 - u^5 + 5u^4 + 3u^3 + 3u^2 + 2a + 2, \\ u^8 - u^6 + 2u^5 + 3u^4 + 2u^3 - u^2 + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 64 representations.

¹The 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>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

$$\mathbf{I. } I_1^u = \langle 2.17 \times 10^{128} u^{55} + 7.05 \times 10^{128} u^{54} + \dots + 1.14 \times 10^{129} b + 3.31 \times 10^{128}, -6.03 \times 10^{129} u^{55} - 1.05 \times 10^{130} u^{54} + \dots + 3.29 \times 10^{130} a + 8.03 \times 10^{131}, u^{56} + 3u^{55} + \dots - 86u - 29 \rangle$$

(i) Arc colorings

$$\begin{aligned} a_4 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_7 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_1 &= \begin{pmatrix} 0.183316u^{55} + 0.320439u^{54} + \dots - 36.3951u - 24.3951 \\ -0.191208u^{55} - 0.621035u^{54} + \dots - 24.1471u - 0.291791 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 1 \\ -u^2 \end{pmatrix} \\ a_2 &= \begin{pmatrix} 0.329942u^{55} + 0.877435u^{54} + \dots + 2.17359u - 17.4475 \\ -0.228740u^{55} - 0.774692u^{54} + \dots - 38.4713u - 3.68817 \end{pmatrix} \\ a_5 &= \begin{pmatrix} 0.00194160u^{55} + 0.125899u^{54} + \dots + 24.9331u - 7.18816 \\ -0.0511468u^{55} - 0.283014u^{54} + \dots - 27.4710u - 5.28083 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -0.143680u^{55} - 0.426284u^{54} + \dots - 13.1771u - 13.3885 \\ 0.0842120u^{55} + 0.155045u^{54} + \dots - 15.2642u - 4.53960 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} 0.374524u^{55} + 0.941474u^{54} + \dots - 12.2480u - 24.1033 \\ -0.191208u^{55} - 0.621035u^{54} + \dots - 24.1471u - 0.291791 \end{pmatrix} \\ a_6 &= \begin{pmatrix} -0.225711u^{55} - 0.655623u^{54} + \dots + 8.05046u - 6.26808 \\ 0.0691731u^{55} + 0.270220u^{54} + \dots + 4.64014u + 4.46620 \end{pmatrix} \\ a_9 &= \begin{pmatrix} -0.120671u^{55} - 0.252131u^{54} + \dots + 25.1490u - 10.2596 \\ -0.0170410u^{55} - 0.154222u^{54} + \dots - 24.0061u - 3.26683 \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = -1

$$\mathbf{(iii) } \text{Cusp Shapes} = -0.0612869u^{55} - 0.0909872u^{54} + \dots - 11.4095u - 14.5506$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{56} + 3u^{55} + \dots - 86u - 29$
c_2	$u^{56} - u^{54} + \dots - 12u + 1$
c_3	$u^{56} + 3u^{55} + \dots - 23u + 1$
c_4	$u^{56} - 3u^{55} + \dots + 23u + 1$
c_5, c_8	$u^{56} + u^{55} + \dots - 21u - 1$
c_6, c_{10}	$u^{56} - u^{55} + \dots + 21u - 1$
c_7	$u^{56} - 3u^{55} + \dots + 86u - 29$
c_9	$u^{56} - u^{54} + \dots + 12u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^{56} - 13y^{55} + \dots - 26246y + 841$
c_2, c_9	$y^{56} - 2y^{55} + \dots - 526y + 1$
c_3, c_4	$y^{56} + 5y^{55} + \dots - 155y + 1$
c_5, c_6, c_8 c_{10}	$y^{56} - 41y^{55} + \dots - 91y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.783480 + 0.627461I$ $a = 0.378022 - 0.391050I$ $b = -0.230315 + 0.038880I$	$1.26494 - 1.26950I$	$4.50876 + 0.89106I$
$u = -0.783480 - 0.627461I$ $a = 0.378022 + 0.391050I$ $b = -0.230315 - 0.038880I$	$1.26494 + 1.26950I$	$4.50876 - 0.89106I$
$u = -0.867481 + 0.465833I$ $a = -0.535992 - 1.067720I$ $b = -0.486169 - 0.719576I$	$-3.60092 - 1.79783I$	$-4.19052 + 2.40869I$
$u = -0.867481 - 0.465833I$ $a = -0.535992 + 1.067720I$ $b = -0.486169 + 0.719576I$	$-3.60092 + 1.79783I$	$-4.19052 - 2.40869I$
$u = 0.671481 + 0.714028I$ $a = -0.790076 - 0.970719I$ $b = -0.1029550 - 0.0679357I$	$-1.91385 + 4.83850I$	$-2.53419 - 6.95729I$
$u = 0.671481 - 0.714028I$ $a = -0.790076 + 0.970719I$ $b = -0.1029550 + 0.0679357I$	$-1.91385 - 4.83850I$	$-2.53419 + 6.95729I$
$u = -0.907848 + 0.325017I$ $a = -0.02327 - 1.45567I$ $b = 1.32128 - 0.52561I$	$2.56248 - 7.32114I$	$3.13433 + 7.29187I$
$u = -0.907848 - 0.325017I$ $a = -0.02327 + 1.45567I$ $b = 1.32128 + 0.52561I$	$2.56248 + 7.32114I$	$3.13433 - 7.29187I$
$u = 0.614585 + 0.660088I$ $a = 0.771966 - 0.367815I$ $b = 0.794571 - 0.247178I$	$-3.06725 - 0.91106I$	$-2.78612 + 2.04256I$
$u = 0.614585 - 0.660088I$ $a = 0.771966 + 0.367815I$ $b = 0.794571 + 0.247178I$	$-3.06725 + 0.91106I$	$-2.78612 - 2.04256I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.495818 + 0.985480I$ $a = -0.66594 - 1.42520I$ $b = -1.291500 - 0.294118I$	$-1.18098 + 5.45507I$	$-4.29936 - 4.75401I$
$u = 0.495818 - 0.985480I$ $a = -0.66594 + 1.42520I$ $b = -1.291500 + 0.294118I$	$-1.18098 - 5.45507I$	$-4.29936 + 4.75401I$
$u = -1.048230 + 0.400499I$ $a = 0.072661 + 0.652197I$ $b = -1.230370 + 0.109087I$	$3.06725 - 0.91106I$	$2.78612 + 2.04256I$
$u = -1.048230 - 0.400499I$ $a = 0.072661 - 0.652197I$ $b = -1.230370 - 0.109087I$	$3.06725 + 0.91106I$	$2.78612 - 2.04256I$
$u = -1.13343$ $a = 1.35973$ $b = -1.44691$	1.54290	6.38460
$u = -0.874453 + 0.768327I$ $a = 0.122940 - 1.406550I$ $b = 1.197120 - 0.303609I$	$1.91385 - 4.83850I$	$2.53419 + 6.95729I$
$u = -0.874453 - 0.768327I$ $a = 0.122940 + 1.406550I$ $b = 1.197120 + 0.303609I$	$1.91385 + 4.83850I$	$2.53419 - 6.95729I$
$u = 0.987700 + 0.648175I$ $a = 0.09787 - 1.65319I$ $b = -1.007190 - 0.370280I$	$-2.03150 + 6.02280I$	$-3.73094 - 6.75893I$
$u = 0.987700 - 0.648175I$ $a = 0.09787 + 1.65319I$ $b = -1.007190 + 0.370280I$	$-2.03150 - 6.02280I$	$-3.73094 + 6.75893I$
$u = -0.330263 + 0.747920I$ $a = 0.02506 - 1.66118I$ $b = 0.063233 - 0.654816I$	$-5.38278 - 1.94709I$	$-9.07863 + 3.78322I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.330263 - 0.747920I$ $a = 0.02506 + 1.66118I$ $b = 0.063233 + 0.654816I$	$-5.38278 + 1.94709I$	$-9.07863 - 3.78322I$
$u = -0.768372 + 0.912758I$ $a = 0.078803 + 0.713454I$ $b = -0.213245 + 1.196470I$	$-3.96282I$	$0. + 12.03346I$
$u = -0.768372 - 0.912758I$ $a = 0.078803 - 0.713454I$ $b = -0.213245 - 1.196470I$	$3.96282I$	$0. - 12.03346I$
$u = 0.768710 + 0.080853I$ $a = -1.18088 + 1.64494I$ $b = 1.224820 - 0.066557I$	$5.38278 - 1.94709I$	$9.07863 + 3.78322I$
$u = 0.768710 - 0.080853I$ $a = -1.18088 - 1.64494I$ $b = 1.224820 + 0.066557I$	$5.38278 + 1.94709I$	$9.07863 - 3.78322I$
$u = -0.417667 + 0.587372I$ $a = -0.020230 + 0.413680I$ $b = 1.13926 + 1.00938I$	$-2.12732 - 2.99186I$	$-13.6584 + 6.9170I$
$u = -0.417667 - 0.587372I$ $a = -0.020230 - 0.413680I$ $b = 1.13926 - 1.00938I$	$-2.12732 + 2.99186I$	$-13.6584 - 6.9170I$
$u = -1.28361$ $a = -1.43131$ $b = 0.991270$	-3.28334	-1.95800
$u = 0.695004 + 0.172107I$ $a = 0.37195 - 1.39210I$ $b = -1.46649 - 0.46691I$	$5.06898 + 2.94565I$	$6.46008 - 3.65784I$
$u = 0.695004 - 0.172107I$ $a = 0.37195 + 1.39210I$ $b = -1.46649 + 0.46691I$	$5.06898 - 2.94565I$	$6.46008 + 3.65784I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.951068 + 0.899353I$ $a = -0.187043 + 0.873695I$ $b = 0.179049 + 1.120190I$	$-5.00346 + 9.83371I$	0
$u = 0.951068 - 0.899353I$ $a = -0.187043 - 0.873695I$ $b = 0.179049 - 1.120190I$	$-5.00346 - 9.83371I$	0
$u = 0.531582 + 0.418877I$ $a = 0.345342 - 1.304770I$ $b = 0.165425 - 0.641483I$	$-1.26494 + 1.26950I$	$-4.50876 - 0.89106I$
$u = 0.531582 - 0.418877I$ $a = 0.345342 + 1.304770I$ $b = 0.165425 + 0.641483I$	$-1.26494 - 1.26950I$	$-4.50876 + 0.89106I$
$u = -0.246039 + 1.330330I$ $a = -0.109393 + 0.201685I$ $b = -0.925946 + 0.365281I$	$1.17763 - 1.90833I$	0
$u = -0.246039 - 1.330330I$ $a = -0.109393 - 0.201685I$ $b = -0.925946 - 0.365281I$	$1.17763 + 1.90833I$	0
$u = 1.36704$ $a = -0.0603515$ $b = 1.39639$	3.28334	0
$u = 0.606940 + 0.092167I$ $a = 0.587067 + 0.957007I$ $b = 0.141834 + 0.920236I$	$-1.17763 - 1.90833I$	$2.60907 + 2.19068I$
$u = 0.606940 - 0.092167I$ $a = 0.587067 - 0.957007I$ $b = 0.141834 - 0.920236I$	$-1.17763 + 1.90833I$	$2.60907 - 2.19068I$
$u = 0.964815 + 1.009120I$ $a = -0.473801 + 0.532980I$ $b = 0.301392 + 0.797095I$	$-5.06898 - 2.94565I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.964815 - 1.009120I$ $a = -0.473801 - 0.532980I$ $b = 0.301392 - 0.797095I$	$-5.06898 + 2.94565I$	0
$u = -0.584292 + 0.088844I$ $a = 0.95463 + 3.53861I$ $b = -1.181570 - 0.095549I$	$1.18098 + 5.45507I$	$4.29936 - 4.75401I$
$u = -0.584292 - 0.088844I$ $a = 0.95463 - 3.53861I$ $b = -1.181570 + 0.095549I$	$1.18098 - 5.45507I$	$4.29936 + 4.75401I$
$u = -1.29911 + 0.91025I$ $a = 0.216573 + 1.073080I$ $b = -1.42481 + 0.50052I$	$-15.5452I$	0
$u = -1.29911 - 0.91025I$ $a = 0.216573 - 1.073080I$ $b = -1.42481 - 0.50052I$	$15.5452I$	0
$u = 1.33347 + 0.88382I$ $a = -0.220110 + 0.911869I$ $b = 1.41775 + 0.50903I$	$5.00346 + 9.83371I$	0
$u = 1.33347 - 0.88382I$ $a = -0.220110 - 0.911869I$ $b = 1.41775 - 0.50903I$	$5.00346 - 9.83371I$	0
$u = -0.44552 + 1.55785I$ $a = 0.212043 + 0.191232I$ $b = 1.114910 + 0.395467I$	$-2.56248 + 7.32114I$	0
$u = -0.44552 - 1.55785I$ $a = 0.212043 - 0.191232I$ $b = 1.114910 - 0.395467I$	$-2.56248 - 7.32114I$	0
$u = -1.16393 + 1.16318I$ $a = 0.188659 - 0.820953I$ $b = 1.234890 - 0.135915I$	$2.03150 - 6.02280I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.16393 - 1.16318I$ $a = 0.188659 + 0.820953I$ $b = 1.234890 + 0.135915I$	$2.03150 + 6.02280I$	0
$u = -1.34569 + 0.94875I$ $a = 0.236623 + 0.596957I$ $b = -1.32213 + 0.64789I$	$2.12732 - 2.99186I$	0
$u = -1.34569 - 0.94875I$ $a = 0.236623 - 0.596957I$ $b = -1.32213 - 0.64789I$	$2.12732 + 2.99186I$	0
$u = -0.299877$ $a = -4.00586$ $b = 1.49366$	-1.54290	-6.38460
$u = 1.63614 + 0.85817I$ $a = 0.236114 - 0.548173I$ $b = -1.130060 - 0.065159I$	$3.60092 + 1.79783I$	0
$u = 1.63614 - 0.85817I$ $a = 0.236114 + 0.548173I$ $b = -1.130060 + 0.065159I$	$3.60092 - 1.79783I$	0

$$\text{II. } I_2^u = \langle u^7 - u^5 + 2u^4 + 2u^3 + 3u^2 + 2b - 1, 2u^7 - u^6 - u^5 + 5u^4 + 3u^3 + 3u^2 + 2a + 2, u^8 - u^6 + 2u^5 + 3u^4 + 2u^3 - u^2 + 1 \rangle$$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^7 + \frac{1}{2}u^6 + \dots - \frac{3}{2}u^2 - 1 \\ -\frac{1}{2}u^7 + \frac{1}{2}u^5 + \dots - \frac{3}{2}u^2 + \frac{1}{2} \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} \frac{1}{2}u^6 - \frac{1}{2}u^5 + \dots - u - 1 \\ -\frac{1}{2}u^7 + \frac{1}{2}u^5 + \dots + u + \frac{1}{2} \end{pmatrix}$$

$$a_5 = \begin{pmatrix} \frac{1}{2}u^7 - \frac{1}{2}u^5 + \dots + \frac{3}{2}u + 1 \\ -\frac{1}{2}u^5 + \frac{1}{2}u^4 + \dots + \frac{1}{2}u - 1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -\frac{1}{2}u^7 + u^6 + \dots + \frac{1}{2}u - 1 \\ -\frac{1}{2}u^5 + \frac{1}{2}u^4 + \dots - \frac{3}{2}u^2 + \frac{1}{2}u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -\frac{1}{2}u^7 + \frac{1}{2}u^6 + \dots - \frac{1}{2}u^3 - \frac{3}{2} \\ -\frac{1}{2}u^7 + \frac{1}{2}u^5 + \dots - \frac{3}{2}u^2 + \frac{1}{2} \end{pmatrix}$$

$$a_6 = \begin{pmatrix} \frac{1}{2}u^7 + \frac{1}{2}u^4 + \dots - \frac{1}{2}u + \frac{1}{2} \\ -\frac{1}{2}u^7 - u^4 - u^3 - \frac{3}{2}u^2 - u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^7 - \frac{1}{2}u^6 + \dots - \frac{3}{2}u + \frac{1}{2} \\ \frac{1}{2}u^7 - u^6 + 2u^4 - u^3 - \frac{3}{2}u^2 + 1 \end{pmatrix}$$

(ii) Obstruction class = 1

$$\text{(iii) Cusp Shapes} = -4u^7 + u^6 + u^5 - 5u^4 - 10u^3 - 14u^2 + 4u - 1$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^8 - u^6 - 2u^5 + 3u^4 - 2u^3 - u^2 + 1$
c_2	$u^8 - u^7 + u^6 + u^5 - 2u^4 - u^3 - 3u^2 - 2u - 1$
c_3	$u^8 + 4u^7 + 10u^6 + 16u^5 + 15u^4 + 8u^3 + u^2 - u - 1$
c_4	$u^8 - 4u^7 + 10u^6 - 16u^5 + 15u^4 - 8u^3 + u^2 + u - 1$
c_5, c_{10}	$u^8 - 3u^6 - u^5 + 4u^4 + 3u^3 - 3u^2 - 3u + 1$
c_6, c_8	$u^8 - 3u^6 + u^5 + 4u^4 - 3u^3 - 3u^2 + 3u + 1$
c_7	$u^8 - u^6 + 2u^5 + 3u^4 + 2u^3 - u^2 + 1$
c_9	$u^8 + u^7 + u^6 - u^5 - 2u^4 + u^3 - 3u^2 + 2u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^8 - 2y^7 + 7y^6 - 12y^5 + 5y^4 - 12y^3 + 7y^2 - 2y + 1$
c_2, c_9	$y^8 + y^7 - y^6 - 13y^5 - 6y^4 + 13y^3 + 9y^2 + 2y + 1$
c_3, c_4	$y^8 + 4y^7 + 2y^6 - 18y^5 - 5y^4 - 22y^3 - 13y^2 - 3y + 1$
c_5, c_6, c_8 c_{10}	$y^8 - 6y^7 + 17y^6 - 31y^5 + 42y^4 - 45y^3 + 35y^2 - 15y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.564069 + 0.825728I$ $a = 1.16899 - 1.40408I$ $b = 1.168990 - 0.247374I$	$-6.39156I$	$0. + 8.17644I$
$u = -0.564069 - 0.825728I$ $a = 1.16899 + 1.40408I$ $b = 1.168990 + 0.247374I$	$6.39156I$	$0. - 8.17644I$
$u = -0.747139$ $a = -1.89022$ $b = -0.283291$	-4.69721	-8.73000
$u = -1.33844$ $a = 0.308010$ $b = -1.29891$	4.69721	8.73000
$u = 0.468348 + 0.438200I$ $a = -0.445605 - 1.005710I$ $b = 0.737885 - 0.854835I$	$-1.62267 + 2.99663I$	$2.80411 - 6.12718I$
$u = 0.468348 - 0.438200I$ $a = -0.445605 + 1.005710I$ $b = 0.737885 + 0.854835I$	$-1.62267 - 2.99663I$	$2.80411 + 6.12718I$
$u = 1.13851 + 1.06522I$ $a = 0.067722 - 0.648589I$ $b = -1.115770 - 0.497712I$	$1.62267 + 2.99663I$	$-2.80411 - 6.12718I$
$u = 1.13851 - 1.06522I$ $a = 0.067722 + 0.648589I$ $b = -1.115770 + 0.497712I$	$1.62267 - 2.99663I$	$-2.80411 + 6.12718I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^8 - u^6 - 2u^5 + 3u^4 - 2u^3 - u^2 + 1)(u^{56} + 3u^{55} + \dots - 86u - 29)$
c_2	$(u^8 - u^7 + \dots - 2u - 1)(u^{56} - u^{54} + \dots - 12u + 1)$
c_3	$(u^8 + 4u^7 + 10u^6 + 16u^5 + 15u^4 + 8u^3 + u^2 - u - 1)$ $\cdot (u^{56} + 3u^{55} + \dots - 23u + 1)$
c_4	$(u^8 - 4u^7 + 10u^6 - 16u^5 + 15u^4 - 8u^3 + u^2 + u - 1)$ $\cdot (u^{56} - 3u^{55} + \dots + 23u + 1)$
c_5	$(u^8 - 3u^6 + \dots - 3u + 1)(u^{56} + u^{55} + \dots - 21u - 1)$
c_6	$(u^8 - 3u^6 + \dots + 3u + 1)(u^{56} - u^{55} + \dots + 21u - 1)$
c_7	$(u^8 - u^6 + 2u^5 + 3u^4 + 2u^3 - u^2 + 1)(u^{56} - 3u^{55} + \dots + 86u - 29)$
c_8	$(u^8 - 3u^6 + \dots + 3u + 1)(u^{56} + u^{55} + \dots - 21u - 1)$
c_9	$(u^8 + u^7 + \dots + 2u - 1)(u^{56} - u^{54} + \dots + 12u + 1)$
c_{10}	$(u^8 - 3u^6 + \dots - 3u + 1)(u^{56} - u^{55} + \dots + 21u - 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7	$(y^8 - 2y^7 + 7y^6 - 12y^5 + 5y^4 - 12y^3 + 7y^2 - 2y + 1)$ $\cdot (y^{56} - 13y^{55} + \dots - 26246y + 841)$
c_2, c_9	$(y^8 + y^7 - y^6 - 13y^5 - 6y^4 + 13y^3 + 9y^2 + 2y + 1)$ $\cdot (y^{56} - 2y^{55} + \dots - 526y + 1)$
c_3, c_4	$(y^8 + 4y^7 + 2y^6 - 18y^5 - 5y^4 - 22y^3 - 13y^2 - 3y + 1)$ $\cdot (y^{56} + 5y^{55} + \dots - 155y + 1)$
c_5, c_6, c_8 c_{10}	$(y^8 - 6y^7 + 17y^6 - 31y^5 + 42y^4 - 45y^3 + 35y^2 - 15y + 1)$ $\cdot (y^{56} - 41y^{55} + \dots - 91y + 1)$