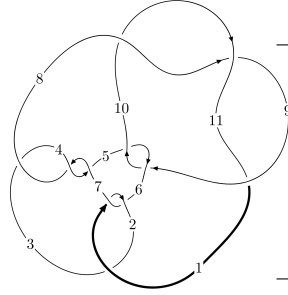
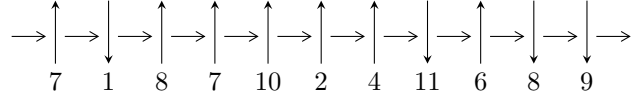


11n₉₈ (K11n₉₈)



A knot diagram¹

Linearized knot diagram



Solving Sequence

$$8,11 \xrightarrow{c_8} 9 \xrightarrow{c_{11}} 1,4 \xrightarrow{c_3} 3 \xrightarrow{c_2} 2 \xrightarrow{c_7} 7 \xrightarrow{c_4} 5 \xrightarrow{c_6} 6 \xrightarrow{c_{10}} 10 \twoheadrightarrow c_1, c_5, c_9$$

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -325810u^{16} + 546213u^{15} + \dots + 3637114b - 2536642,$$

$$- 877137u^{16} + 1987958u^{15} + \dots + 7274228a - 10784281, u^{17} - 2u^{16} + \dots + 13u - 4 \rangle$$

$$I_2^u = \langle -u^{10} + u^9 + 4u^8 - 3u^7 - 6u^6 + 2u^5 + 2u^4 - u^2a + 3u^3 + 3u^2 + b + a - 3u - 2, 2u^{10} - 5u^9 + \dots - 4a + 5,$$

$$u^{11} - u^{10} - 4u^9 + 3u^8 + 6u^7 - 2u^6 - 2u^5 - 3u^4 - 3u^3 + 3u^2 + 2u + 1 \rangle$$

$$I_3^u = \langle au + b + a + 2u + 3, a^2 + 2au + 4a + 2u + 6, u^2 + u - 1 \rangle$$

$$I_4^u = \langle b - 1, 2a - 1, u - 1 \rangle$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 44 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.

I.

$$I_1^u = \langle -3.26 \times 10^5 u^{16} + 5.46 \times 10^5 u^{15} + \dots + 3.64 \times 10^6 b - 2.54 \times 10^6, -8.77 \times 10^5 u^{16} + 1.99 \times 10^6 u^{15} + \dots + 7.27 \times 10^6 a - 1.08 \times 10^7, u^{17} - 2u^{16} + \dots + 13u - 4 \rangle$$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.120581u^{16} - 0.273288u^{15} + \dots - 0.0580715u + 1.48253 \\ 0.0895793u^{16} - 0.150178u^{15} + \dots + 0.0542218u + 0.697433 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.0310022u^{16} - 0.123110u^{15} + \dots - 0.112293u + 0.785100 \\ 0.0895793u^{16} - 0.150178u^{15} + \dots + 0.0542218u + 0.697433 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.239444u^{16} - 0.304221u^{15} + \dots - 1.56094u + 1.51558 \\ 0.205575u^{16} - 0.224465u^{15} + \dots - 0.728410u + 0.910041 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.235464u^{16} - 0.270574u^{15} + \dots - 0.673677u + 2.19687 \\ 0.182621u^{16} - 0.156800u^{15} + \dots - 1.28067u + 0.925424 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.360026u^{16} - 0.577509u^{15} + \dots - 0.619016u + 2.99812 \\ 0.295154u^{16} - 0.374642u^{15} + \dots - 1.67419u + 1.60747 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.474993u^{16} - 0.539864u^{15} + \dots - 1.82912u + 3.29061 \\ 0.410121u^{16} - 0.336997u^{15} + \dots - 2.88429u + 1.89997 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$

(ii) Obstruction class = -1

$$(iii) \text{ Cusp Shapes} = \frac{9594931}{7274228}u^{16} - \frac{15193461}{7274228}u^{15} + \dots + \frac{10670363}{7274228}u + \frac{21150807}{1818557}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_4 c_6, c_7	$u^{17} - u^{16} + \dots - 4u^2 - 1$
c_2	$u^{17} + 5u^{16} + \dots - 8u - 1$
c_5, c_9	$u^{17} - 3u^{16} + \dots + 22u - 8$
c_8, c_{10}, c_{11}	$u^{17} - 2u^{16} + \dots + 13u - 4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4 c_6, c_7	$y^{17} + 5y^{16} + \dots - 8y - 1$
c_2	$y^{17} + 13y^{16} + \dots - 12y - 1$
c_5, c_9	$y^{17} + 9y^{16} + \dots - 12y - 64$
c_8, c_{10}, c_{11}	$y^{17} - 16y^{16} + \dots + 209y - 16$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.240053 + 0.973100I$ $a = 0.644042 - 0.652010I$ $b = -0.678341 - 1.093890I$	$0.65577 + 8.75138I$	$0.84209 - 7.19652I$
$u = -0.240053 - 0.973100I$ $a = 0.644042 + 0.652010I$ $b = -0.678341 + 1.093890I$	$0.65577 - 8.75138I$	$0.84209 + 7.19652I$
$u = -0.911746 + 0.271963I$ $a = 0.521420 - 0.719384I$ $b = -0.187558 - 0.379982I$	$-1.69658 + 0.80451I$	$-2.69480 - 2.52231I$
$u = -0.911746 - 0.271963I$ $a = 0.521420 + 0.719384I$ $b = -0.187558 + 0.379982I$	$-1.69658 - 0.80451I$	$-2.69480 + 2.52231I$
$u = 1.114510 + 0.218797I$ $a = 0.635665 + 0.251760I$ $b = 1.157790 + 0.487195I$	$0.354258 - 0.834124I$	$0.06498 + 5.84789I$
$u = 1.114510 - 0.218797I$ $a = 0.635665 - 0.251760I$ $b = 1.157790 - 0.487195I$	$0.354258 + 0.834124I$	$0.06498 - 5.84789I$
$u = -1.030910 + 0.649737I$ $a = -0.466920 + 0.601803I$ $b = -0.583285 + 0.914805I$	$-1.75655 - 3.15519I$	$-1.08772 + 4.41422I$
$u = -1.030910 - 0.649737I$ $a = -0.466920 - 0.601803I$ $b = -0.583285 - 0.914805I$	$-1.75655 + 3.15519I$	$-1.08772 - 4.41422I$
$u = 0.248382 + 0.709434I$ $a = -0.785996 - 0.998686I$ $b = 0.784905 - 0.787523I$	$2.78581 - 2.60100I$	$4.98680 + 3.49505I$
$u = 0.248382 - 0.709434I$ $a = -0.785996 + 0.998686I$ $b = 0.784905 + 0.787523I$	$2.78581 + 2.60100I$	$4.98680 - 3.49505I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.44333 + 0.29962I$ $a = -0.27964 + 2.02194I$ $b = 0.606656 + 1.025000I$	$-2.68580 + 6.31167I$	$-1.34813 - 5.64607I$
$u = -1.44333 - 0.29962I$ $a = -0.27964 - 2.02194I$ $b = 0.606656 - 1.025000I$	$-2.68580 - 6.31167I$	$-1.34813 + 5.64607I$
$u = 1.43553 + 0.42213I$ $a = 0.59170 + 1.89308I$ $b = -0.678472 + 1.240020I$	$-4.6382 - 13.7590I$	$-2.60534 + 8.09148I$
$u = 1.43553 - 0.42213I$ $a = 0.59170 - 1.89308I$ $b = -0.678472 - 1.240020I$	$-4.6382 + 13.7590I$	$-2.60534 - 8.09148I$
$u = 1.67968 + 0.04846I$ $a = -0.20221 - 1.49330I$ $b = -0.239314 - 0.869369I$	$-11.59490 + 1.04318I$	$-1.35194 - 7.04363I$
$u = 1.67968 - 0.04846I$ $a = -0.20221 + 1.49330I$ $b = -0.239314 + 0.869369I$	$-11.59490 - 1.04318I$	$-1.35194 + 7.04363I$
$u = 0.295856$ $a = 1.43389$ $b = 0.635251$	0.963952	10.6380

$$I_2^u = \langle -u^{10} + u^9 + \dots + a - 2, 2u^{10} - 5u^9 + \dots - 4a + 5, u^{11} - u^{10} + \dots + 2u + 1 \rangle$$

II.

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^{10} - u^9 - 4u^8 + 3u^7 + 6u^6 - 2u^5 - 2u^4 + u^2a - 3u^3 - 3u^2 - a + 3u + 2 \\ a \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^{10} + u^9 + \dots + 2a - 2 \\ u^{10} - u^9 - 4u^8 + 3u^7 + 6u^6 - 2u^5 - 2u^4 + u^2a - 3u^3 - 3u^2 - a + 3u + 2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -u^{10} + u^9 + \dots + 2a - 2 \\ u^{10} - u^9 + \dots - a + 2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^{10}a + 2u^{10} + \dots - 2a + 3 \\ -u^5a - u^6 + 2u^3a + 2u^4 - au - 2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u^7 - 2u^5 + 2u \\ u^9 - 3u^7 + 3u^5 - u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^{10} - 3u^8 + 2u^6 + 3u^4 - 3u^2 - 1 \\ u^{10} + u^9 - 3u^8 - 4u^7 + 2u^6 + 5u^5 + 3u^4 - 3u^2 - 3u - 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $4u^9 - 16u^7 - 4u^6 + 20u^5 + 12u^4 + 4u^3 - 8u^2 - 20u - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_4 c_6, c_7	$u^{22} + 3u^{21} + \dots + 24u + 9$
c_2	$u^{22} + 11u^{21} + \dots + 432u + 81$
c_5, c_9	$(u^{11} + u^{10} + 2u^9 + u^8 + 4u^7 + 2u^6 + 4u^5 + u^4 + 3u^3 - u^2 - 1)^2$
c_8, c_{10}, c_{11}	$(u^{11} - u^{10} - 4u^9 + 3u^8 + 6u^7 - 2u^6 - 2u^5 - 3u^4 - 3u^3 + 3u^2 + 2u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4 c_6, c_7	$y^{22} + 11y^{21} + \dots + 432y + 81$
c_2	$y^{22} - y^{21} + \dots + 35640y + 6561$
c_5, c_9	$(y^{11} + 3y^{10} + \dots - 2y - 1)^2$
c_8, c_{10}, c_{11}	$(y^{11} - 9y^{10} + \dots - 2y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.14725$ $a = -2.18308 + 3.31504I$ $b = 0.181376 + 1.048190I$	-5.48524	0.376260
$u = -1.14725$ $a = -2.18308 - 3.31504I$ $b = 0.181376 - 1.048190I$	-5.48524	0.376260
$u = -0.044199 + 0.849205I$ $a = 0.547434 + 0.348829I$ $b = -0.853835 + 0.533591I$	$2.35273 + 3.04152I$	$4.06121 - 2.82242I$
$u = -0.044199 + 0.849205I$ $a = -0.372720 + 0.162477I$ $b = 0.714099 + 0.923041I$	$2.35273 + 3.04152I$	$4.06121 - 2.82242I$
$u = -0.044199 - 0.849205I$ $a = 0.547434 - 0.348829I$ $b = -0.853835 - 0.533591I$	$2.35273 - 3.04152I$	$4.06121 + 2.82242I$
$u = -0.044199 - 0.849205I$ $a = -0.372720 - 0.162477I$ $b = 0.714099 - 0.923041I$	$2.35273 - 3.04152I$	$4.06121 + 2.82242I$
$u = -1.232090 + 0.392876I$ $a = 0.674566 - 0.370203I$ $b = 0.623653 - 0.552777I$	$-1.31282 + 1.41699I$	$0.791306 - 0.633731I$
$u = -1.232090 + 0.392876I$ $a = 0.48177 - 1.51619I$ $b = -0.555909 - 0.782909I$	$-1.31282 + 1.41699I$	$0.791306 - 0.633731I$
$u = -1.232090 - 0.392876I$ $a = 0.674566 + 0.370203I$ $b = 0.623653 + 0.552777I$	$-1.31282 - 1.41699I$	$0.791306 + 0.633731I$
$u = -1.232090 - 0.392876I$ $a = 0.48177 + 1.51619I$ $b = -0.555909 + 0.782909I$	$-1.31282 - 1.41699I$	$0.791306 + 0.633731I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.317220 + 0.129556I$		
$a = 0.469425 + 0.990105I$	$-8.47148 - 2.94672I$	$-5.79937 + 4.11787I$
$b = -0.752651 + 0.945347I$		
$u = 1.317220 + 0.129556I$		
$a = -0.15850 - 2.09923I$	$-8.47148 - 2.94672I$	$-5.79937 + 4.11787I$
$b = -0.14927 - 1.48798I$		
$u = 1.317220 - 0.129556I$		
$a = 0.469425 - 0.990105I$	$-8.47148 + 2.94672I$	$-5.79937 - 4.11787I$
$b = -0.752651 - 0.945347I$		
$u = 1.317220 - 0.129556I$		
$a = -0.15850 + 2.09923I$	$-8.47148 + 2.94672I$	$-5.79937 - 4.11787I$
$b = -0.14927 + 1.48798I$		
$u = 1.304640 + 0.385413I$		
$a = -0.579828 + 0.055525I$	$-1.85809 - 7.47524I$	$-0.22908 + 5.55460I$
$b = -1.081770 - 0.344108I$		
$u = 1.304640 + 0.385413I$		
$a = -0.45041 - 1.69192I$	$-1.85809 - 7.47524I$	$-0.22908 + 5.55460I$
$b = 0.747184 - 1.181250I$		
$u = 1.304640 - 0.385413I$		
$a = -0.579828 - 0.055525I$	$-1.85809 + 7.47524I$	$-0.22908 - 5.55460I$
$b = -1.081770 + 0.344108I$		
$u = 1.304640 - 0.385413I$		
$a = -0.45041 + 1.69192I$	$-1.85809 + 7.47524I$	$-0.22908 - 5.55460I$
$b = 0.747184 + 1.181250I$		
$u = -0.271947 + 0.385187I$		
$a = 1.270550 + 0.259399I$	$-3.59460 + 1.13130I$	$-0.01220 - 6.05785I$
$b = -0.087548 + 1.187670I$		
$u = -0.271947 + 0.385187I$		
$a = 1.80079 + 2.03466I$	$-3.59460 + 1.13130I$	$-0.01220 - 6.05785I$
$b = -0.285332 - 0.830788I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.271947 - 0.385187I$		
$a = 1.270550 - 0.259399I$	$-3.59460 - 1.13130I$	$-0.01220 + 6.05785I$
$b = -0.087548 - 1.187670I$		
$u = -0.271947 - 0.385187I$		
$a = 1.80079 - 2.03466I$	$-3.59460 - 1.13130I$	$-0.01220 + 6.05785I$
$b = -0.285332 + 0.830788I$		

$$\text{III. } I_3^u = \langle au + b + a + 2u + 3, a^2 + 2au + 4a + 2u + 6, u^2 + u - 1 \rangle$$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ -u + 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u \\ -u + 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} a \\ -au - a - 2u - 3 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} au + 2a + 2u + 3 \\ -au - a - 2u - 3 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} au + 2a + u + 3 \\ -au - a - 3u - 2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 2au + 3a + 6u + 9 \\ -1 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -au - a - 2u - 3 \\ 0 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -a - u - 2 \\ au + u + 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = -8

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_4 c_6, c_7	$(u^2 + 1)^2$
c_2	$(u + 1)^4$
c_5, c_9	$u^4 + 3u^2 + 1$
c_8	$(u^2 + u - 1)^2$
c_{10}, c_{11}	$(u^2 - u - 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4 c_6, c_7	$(y + 1)^4$
c_2	$(y - 1)^4$
c_5, c_9	$(y^2 + 3y + 1)^2$
c_8, c_{10}, c_{11}	$(y^2 - 3y + 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.618034$ $a = -2.61803 + 0.61803I$ $b = -1.000000I$	-4.27683	-8.00000
$u = 0.618034$ $a = -2.61803 - 0.61803I$ $b = 1.000000I$	-4.27683	-8.00000
$u = -1.61803$ $a = -0.38197 + 1.61803I$ $b = 1.000000I$	-12.1725	-8.00000
$u = -1.61803$ $a = -0.38197 - 1.61803I$ $b = -1.000000I$	-12.1725	-8.00000

$$\text{IV. } I_4^u = \langle b - 1, 2a - 1, u - 1 \rangle$$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.5 \\ 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.5 \\ 1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1.5 \\ 1 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 2 \\ 2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 2 \\ 2 \end{pmatrix}$$

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

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

(ii) Obstruction class = 1

(iii) Cusp Shapes = -2.25

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

Crossings	u -Polynomials at each crossing
c_1, c_3, c_4 c_{10}, c_{11}	$u + 1$
c_2, c_6, c_7 c_8	$u - 1$
c_5, c_9	u

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_4, c_6, c_7 c_8, c_{10}, c_{11}	$y - 1$
c_5, c_9	y

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$		
$a = 0.500000$	0	-2.25000
$b = 1.00000$		

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_3, c_4	$(u+1)(u^2+1)^2(u^{17}-u^{16}+\dots-4u^2-1)(u^{22}+3u^{21}+\dots+24u+9)$
c_2	$(u-1)(u+1)^4(u^{17}+5u^{16}+\dots-8u-1)$ $\cdot (u^{22}+11u^{21}+\dots+432u+81)$
c_5, c_9	$u(u^4+3u^2+1)$ $\cdot (u^{11}+u^{10}+2u^9+u^8+4u^7+2u^6+4u^5+u^4+3u^3-u^2-1)^2$ $\cdot (u^{17}-3u^{16}+\dots+22u-8)$
c_6, c_7	$(u-1)(u^2+1)^2(u^{17}-u^{16}+\dots-4u^2-1)(u^{22}+3u^{21}+\dots+24u+9)$
c_8	$(u-1)(u^2+u-1)^2$ $\cdot (u^{11}-u^{10}-4u^9+3u^8+6u^7-2u^6-2u^5-3u^4-3u^3+3u^2+2u+1)^2$ $\cdot (u^{17}-2u^{16}+\dots+13u-4)$
c_{10}, c_{11}	$(u+1)(u^2-u-1)^2$ $\cdot (u^{11}-u^{10}-4u^9+3u^8+6u^7-2u^6-2u^5-3u^4-3u^3+3u^2+2u+1)^2$ $\cdot (u^{17}-2u^{16}+\dots+13u-4)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4 c_6, c_7	$(y - 1)(y + 1)^4(y^{17} + 5y^{16} + \dots - 8y - 1)$ $\cdot (y^{22} + 11y^{21} + \dots + 432y + 81)$
c_2	$((y - 1)^5)(y^{17} + 13y^{16} + \dots - 12y - 1)$ $\cdot (y^{22} - y^{21} + \dots + 35640y + 6561)$
c_5, c_9	$y(y^2 + 3y + 1)^2(y^{11} + 3y^{10} + \dots - 2y - 1)^2$ $\cdot (y^{17} + 9y^{16} + \dots - 12y - 64)$
c_8, c_{10}, c_{11}	$(y - 1)(y^2 - 3y + 1)^2(y^{11} - 9y^{10} + \dots - 2y - 1)^2$ $\cdot (y^{17} - 16y^{16} + \dots + 209y - 16)$