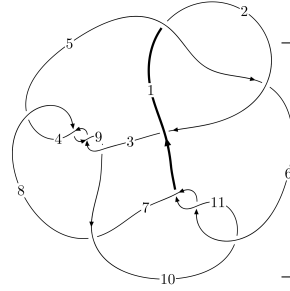
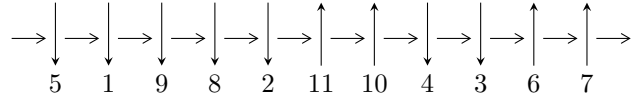


11a₁₆₅ (K11a₁₆₅)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -63586u^{30} - 96933u^{29} + \dots + 270694b + 252865,$$

$$- 172973u^{30} + 5647u^{29} + \dots + 406041a + 576964, u^{31} - 2u^{30} + \dots + 7u + 3 \rangle$$

$$I_2^u = \langle -u^6 + 2u^4 - u^2 + b, u^4 - u^2 + a + 1, u^{12} - 4u^{10} - u^9 + 6u^8 + 3u^7 - 3u^6 - 3u^5 - u^4 + u^3 + u^2 + 1 \rangle$$

$$I_3^u = \langle b^2 + 2, a - 1, u + 1 \rangle$$

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

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 46 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.

$$I_1^u = \langle -6.36 \times 10^4 u^{30} - 9.69 \times 10^4 u^{29} + \dots + 2.71 \times 10^5 b + 2.53 \times 10^5, -1.73 \times 10^5 u^{30} + 5647 u^{29} + \dots + 4.06 \times 10^5 a + 5.77 \times 10^5, u^{31} - 2u^{30} + \dots + 7u + 3 \rangle$$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_7 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^3 + 2u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.425999u^{30} - 0.0139075u^{29} + \dots + 0.292554u - 1.42095 \\ 0.234900u^{30} + 0.358091u^{29} + \dots - 0.536610u - 0.934136 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.0212540u^{30} + 0.251935u^{29} + \dots + 3.63359u - 1.34469 \\ 0.698604u^{30} + 0.00781325u^{29} + \dots - 4.34020u - 2.37215 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.0388902u^{30} - 0.177556u^{29} + \dots - 1.16014u - 2.39710 \\ 1.11058u^{30} - 1.37314u^{29} + \dots - 6.76891u - 2.03205 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.490431u^{30} + 0.627566u^{29} + \dots - 2.92349u + 0.473429 \\ -0.126604u^{30} - 0.0106726u^{29} + \dots + 0.479597u + 0.823236 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.127981u^{30} - 0.621792u^{29} + \dots - 1.70878u - 2.89597 \\ 0.449559u^{30} - 0.465108u^{29} + \dots - 4.73911u - 1.82622 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.127981u^{30} - 0.621792u^{29} + \dots - 1.70878u - 2.89597 \\ 0.449559u^{30} - 0.465108u^{29} + \dots - 4.73911u - 1.82622 \end{pmatrix}$$

(ii) Obstruction class = -1

$$(iii) \text{ Cusp Shapes} = -\frac{36729}{135347}u^{30} + \frac{438694}{135347}u^{29} + \dots - \frac{659989}{135347}u - \frac{1662732}{135347}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{31} + 2u^{30} + \dots + 3u + 3$
c_2	$u^{31} + 14u^{30} + \dots + 57u + 9$
c_3, c_4, c_8 c_9	$u^{31} - 2u^{30} + \dots - 4u + 2$
c_6, c_{10}, c_{11}	$u^{31} - 2u^{30} + \dots + 7u + 3$
c_7	$u^{31} + 6u^{30} + \dots + 480u + 144$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{31} - 14y^{30} + \dots + 57y - 9$
c_2	$y^{31} + 10y^{30} + \dots - 927y - 81$
c_3, c_4, c_8 c_9	$y^{31} + 34y^{30} + \dots + 8y - 4$
c_6, c_{10}, c_{11}	$y^{31} - 30y^{30} + \dots + 73y - 9$
c_7	$y^{31} + 6y^{30} + \dots + 340992y - 20736$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.747967 + 0.552318I$ $a = -0.713528 - 0.387808I$ $b = 0.02331 - 1.55614I$	$8.03531 - 1.33136I$	$3.69839 + 3.67384I$
$u = -0.747967 - 0.552318I$ $a = -0.713528 + 0.387808I$ $b = 0.02331 + 1.55614I$	$8.03531 + 1.33136I$	$3.69839 - 3.67384I$
$u = -0.243783 + 0.874135I$ $a = 1.32514 + 1.20394I$ $b = 0.15566 + 1.56441I$	$4.49002 - 8.13226I$	$-1.22552 + 6.19776I$
$u = -0.243783 - 0.874135I$ $a = 1.32514 - 1.20394I$ $b = 0.15566 - 1.56441I$	$4.49002 + 8.13226I$	$-1.22552 - 6.19776I$
$u = 0.187925 + 0.787047I$ $a = 1.52076 - 0.52806I$ $b = 0.536373 - 0.593565I$	$-2.74305 + 5.61846I$	$-5.03431 - 7.58458I$
$u = 0.187925 - 0.787047I$ $a = 1.52076 + 0.52806I$ $b = 0.536373 + 0.593565I$	$-2.74305 - 5.61846I$	$-5.03431 + 7.58458I$
$u = 1.291670 + 0.135737I$ $a = 0.669274 + 0.188581I$ $b = 0.616280 + 0.162193I$	$3.07624 + 0.70891I$	$0.467031 + 1.080424I$
$u = 1.291670 - 0.135737I$ $a = 0.669274 - 0.188581I$ $b = 0.616280 - 0.162193I$	$3.07624 - 0.70891I$	$0.467031 - 1.080424I$
$u = -1.295540 + 0.167103I$ $a = -0.144945 + 0.148783I$ $b = -0.186471 + 1.311270I$	$6.17087 - 2.05965I$	$3.01805 + 3.45931I$
$u = -1.295540 - 0.167103I$ $a = -0.144945 - 0.148783I$ $b = -0.186471 - 1.311270I$	$6.17087 + 2.05965I$	$3.01805 - 3.45931I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.110837 + 0.674662I$		
$a = 1.69961 - 0.29549I$	$-3.44246 - 1.82697I$	$-7.90377 + 0.75879I$
$b = 0.564530 - 0.355378I$		
$u = -0.110837 - 0.674662I$		
$a = 1.69961 + 0.29549I$	$-3.44246 + 1.82697I$	$-7.90377 - 0.75879I$
$b = 0.564530 + 0.355378I$		
$u = 0.539016 + 0.347969I$		
$a = -0.483262 + 0.499206I$	$0.79951 + 1.42577I$	$2.59856 - 5.78981I$
$b = -0.056165 + 0.591866I$		
$u = 0.539016 - 0.347969I$		
$a = -0.483262 - 0.499206I$	$0.79951 - 1.42577I$	$2.59856 + 5.78981I$
$b = -0.056165 - 0.591866I$		
$u = 1.336820 + 0.271979I$		
$a = -0.762109 - 0.353439I$	$1.12658 + 5.26550I$	$-2.04896 - 3.53729I$
$b = -0.693697 - 0.302370I$		
$u = 1.336820 - 0.271979I$		
$a = -0.762109 + 0.353439I$	$1.12658 - 5.26550I$	$-2.04896 + 3.53729I$
$b = -0.693697 + 0.302370I$		
$u = -1.365240 + 0.016357I$		
$a = 0.375335 - 0.295499I$	$6.70945 - 2.28480I$	$5.08423 + 3.97462I$
$b = 0.219883 + 0.980437I$		
$u = -1.365240 - 0.016357I$		
$a = 0.375335 + 0.295499I$	$6.70945 + 2.28480I$	$5.08423 - 3.97462I$
$b = 0.219883 - 0.980437I$		
$u = -1.357540 + 0.242005I$		
$a = 1.095790 - 0.491084I$	$4.64430 - 4.47443I$	$3.19401 + 4.68893I$
$b = 0.504728 + 0.697564I$		
$u = -1.357540 - 0.242005I$		
$a = 1.095790 + 0.491084I$	$4.64430 + 4.47443I$	$3.19401 - 4.68893I$
$b = 0.504728 - 0.697564I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.37741 + 0.32461I$		
$a = -1.256260 + 0.402763I$	$2.21391 - 9.63102I$	$-0.35492 + 8.36099I$
$b = -0.605451 - 0.666470I$		
$u = -1.37741 - 0.32461I$		
$a = -1.256260 - 0.402763I$	$2.21391 + 9.63102I$	$-0.35492 - 8.36099I$
$b = -0.605451 + 0.666470I$		
$u = -0.064733 + 0.540211I$		
$a = 2.31818 + 1.38359I$	$2.33792 - 0.40564I$	$-4.75380 - 0.07204I$
$b = 0.10758 + 1.45454I$		
$u = -0.064733 - 0.540211I$		
$a = 2.31818 - 1.38359I$	$2.33792 + 0.40564I$	$-4.75380 + 0.07204I$
$b = 0.10758 - 1.45454I$		
$u = 1.42913 + 0.28971I$		
$a = 1.57857 + 0.64636I$	$12.4063 + 6.9101I$	$5.26522 - 3.37631I$
$b = 0.14880 - 1.59912I$		
$u = 1.42913 - 0.28971I$		
$a = 1.57857 - 0.64636I$	$12.4063 - 6.9101I$	$5.26522 + 3.37631I$
$b = 0.14880 + 1.59912I$		
$u = 1.41950 + 0.35977I$		
$a = -1.73304 - 0.34897I$	$9.7790 + 12.5729I$	$2.31989 - 7.10826I$
$b = -0.18574 + 1.59084I$		
$u = 1.41950 - 0.35977I$		
$a = -1.73304 + 0.34897I$	$9.7790 - 12.5729I$	$2.31989 + 7.10826I$
$b = -0.18574 - 1.59084I$		
$u = 1.50305 + 0.05165I$		
$a = 0.296170 + 1.110440I$	$15.6775 + 2.9643I$	$6.12833 - 2.71385I$
$b = 0.02670 - 1.64323I$		
$u = 1.50305 - 0.05165I$		
$a = 0.296170 - 1.110440I$	$15.6775 - 2.9643I$	$6.12833 + 2.71385I$
$b = 0.02670 + 1.64323I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.288107$		
$a = -2.23806$	-1.09849	-10.9050
$b = -0.352652$		

$$\text{II. } I_2^u = \langle -u^6 + 2u^4 - u^2 + b, u^4 - u^2 + a + 1, u^{12} - 4u^{10} + \dots + u^2 + 1 \rangle$$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_7 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^3 + 2u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^4 + u^2 - 1 \\ u^6 - 2u^4 + u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1 \\ u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{10} - 3u^8 + 4u^6 - 3u^4 + u^2 + 1 \\ -u^9 + 3u^7 + u^6 - 3u^5 - 2u^4 + u^3 + u^2 + 1 \end{pmatrix}$$

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

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

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-4u^6 + 8u^4 + 4u^3 - 4u^2 - 4u - 2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5, c_6 c_{10}, c_{11}	$u^{12} - 4u^{10} - u^9 + 6u^8 + 3u^7 - 3u^6 - 3u^5 - u^4 + u^3 + u^2 + 1$
c_2	$u^{12} + 8u^{11} + \dots - 2u + 1$
c_3, c_4, c_8 c_9	$(u^4 + u^3 + 3u^2 + 2u + 1)^3$
c_7	$(u^4 + u^3 + u^2 + 1)^3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5, c_6 c_{10}, c_{11}	$y^{12} - 8y^{11} + \dots + 2y + 1$
c_2	$y^{12} - 8y^{11} + \dots - 6y + 1$
c_3, c_4, c_8 c_9	$(y^4 + 5y^3 + 7y^2 + 2y + 1)^3$
c_7	$(y^4 + y^3 + 3y^2 + 2y + 1)^3$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.021730 + 0.359746I$ $a = -0.381408 - 0.609431I$ $b = -0.395123 - 0.506844I$	$-0.21101 - 1.41510I$	$-1.82674 + 4.90874I$
$u = 1.021730 - 0.359746I$ $a = -0.381408 + 0.609431I$ $b = -0.395123 + 0.506844I$	$-0.21101 + 1.41510I$	$-1.82674 - 4.90874I$
$u = -0.999134 + 0.532546I$ $a = 0.336375 + 0.456876I$ $b = -0.10488 + 1.55249I$	$6.79074 + 3.16396I$	$1.82674 - 2.56480I$
$u = -0.999134 - 0.532546I$ $a = 0.336375 - 0.456876I$ $b = -0.10488 - 1.55249I$	$6.79074 - 3.16396I$	$1.82674 + 2.56480I$
$u = -0.333261 + 0.745439I$ $a = -1.39544 - 0.93867I$ $b = -0.10488 - 1.55249I$	$6.79074 - 3.16396I$	$1.82674 + 2.56480I$
$u = -0.333261 - 0.745439I$ $a = -1.39544 + 0.93867I$ $b = -0.10488 + 1.55249I$	$6.79074 + 3.16396I$	$1.82674 - 2.56480I$
$u = -1.199580 + 0.220395I$ $a = -1.26326 + 0.94165I$ $b = -0.395123 - 0.506844I$	$-0.21101 - 1.41510I$	$-1.82674 + 4.90874I$
$u = -1.199580 - 0.220395I$ $a = -1.26326 - 0.94165I$ $b = -0.395123 + 0.506844I$	$-0.21101 + 1.41510I$	$-1.82674 - 4.90874I$
$u = 1.332400 + 0.212894I$ $a = -1.94094 - 1.39555I$ $b = -0.10488 + 1.55249I$	$6.79074 + 3.16396I$	$1.82674 - 2.56480I$
$u = 1.332400 - 0.212894I$ $a = -1.94094 + 1.39555I$ $b = -0.10488 - 1.55249I$	$6.79074 - 3.16396I$	$1.82674 + 2.56480I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.177855 + 0.580141I$	$-0.21101 + 1.41510I$	$-1.82674 - 4.90874I$
$a = -1.355330 + 0.332215I$		
$b = -0.395123 + 0.506844I$		
$u = 0.177855 - 0.580141I$	$-0.21101 - 1.41510I$	$-1.82674 + 4.90874I$
$a = -1.355330 - 0.332215I$		
$b = -0.395123 - 0.506844I$		

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

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$

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

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

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

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

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

$$a_3 = \begin{pmatrix} 1 \\ b \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1 \\ b - 1 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -1 \\ -b \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -b + 1 \\ 2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -b - 1 \\ -b \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -b - 1 \\ -b \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = 0

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

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.00000$ $a = 1.00000$ $b = 1.414210I$	4.93480	0
$u = -1.00000$ $a = 1.00000$ $b = -1.414210I$	4.93480	0

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

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

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

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

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

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

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

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = 0

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

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

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

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u-1)(u+1)^2$ $\cdot (u^{12} - 4u^{10} - u^9 + 6u^8 + 3u^7 - 3u^6 - 3u^5 - u^4 + u^3 + u^2 + 1)$ $\cdot (u^{31} + 2u^{30} + \dots + 3u + 3)$
c_2	$((u+1)^3)(u^{12} + 8u^{11} + \dots - 2u + 1)(u^{31} + 14u^{30} + \dots + 57u + 9)$
c_3, c_4, c_8 c_9	$u(u^2 + 2)(u^4 + u^3 + \dots + 2u + 1)^3(u^{31} - 2u^{30} + \dots - 4u + 2)$
c_5	$(u-1)^2(u+1)$ $\cdot (u^{12} - 4u^{10} - u^9 + 6u^8 + 3u^7 - 3u^6 - 3u^5 - u^4 + u^3 + u^2 + 1)$ $\cdot (u^{31} + 2u^{30} + \dots + 3u + 3)$
c_6	$(u-1)^2(u+1)$ $\cdot (u^{12} - 4u^{10} - u^9 + 6u^8 + 3u^7 - 3u^6 - 3u^5 - u^4 + u^3 + u^2 + 1)$ $\cdot (u^{31} - 2u^{30} + \dots + 7u + 3)$
c_7	$u^3(u^4 + u^3 + u^2 + 1)^3(u^{31} + 6u^{30} + \dots + 480u + 144)$
c_{10}, c_{11}	$(u-1)(u+1)^2$ $\cdot (u^{12} - 4u^{10} - u^9 + 6u^8 + 3u^7 - 3u^6 - 3u^5 - u^4 + u^3 + u^2 + 1)$ $\cdot (u^{31} - 2u^{30} + \dots + 7u + 3)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$((y-1)^3)(y^{12} - 8y^{11} + \dots + 2y + 1)(y^{31} - 14y^{30} + \dots + 57y - 9)$
c_2	$((y-1)^3)(y^{12} - 8y^{11} + \dots - 6y + 1)(y^{31} + 10y^{30} + \dots - 927y - 81)$
c_3, c_4, c_8 c_9	$y(y+2)^2(y^4 + 5y^3 + \dots + 2y + 1)^3(y^{31} + 34y^{30} + \dots + 8y - 4)$
c_6, c_{10}, c_{11}	$((y-1)^3)(y^{12} - 8y^{11} + \dots + 2y + 1)(y^{31} - 30y^{30} + \dots + 73y - 9)$
c_7	$y^3(y^4 + y^3 + 3y^2 + 2y + 1)^3(y^{31} + 6y^{30} + \dots + 340992y - 20736)$