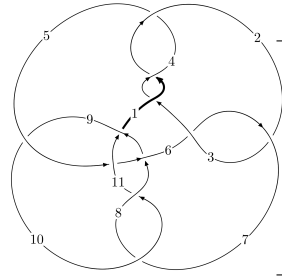
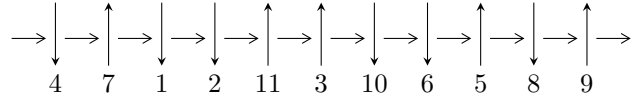


11a₂₅₂ (K11a₂₅₂)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -4.11167 \times 10^{157} u^{70} + 9.80349 \times 10^{157} u^{69} + \dots + 6.48947 \times 10^{158} b + 1.66763 \times 10^{158}, \\ 3.33659 \times 10^{158} u^{70} - 7.80024 \times 10^{158} u^{69} + \dots + 6.48947 \times 10^{158} a + 4.59343 \times 10^{159}, u^{71} - 2u^{70} + \dots + 10 \rangle$$

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

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 77 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.

$$\text{I. } I_1^u = \langle -4.11 \times 10^{157} u^{70} + 9.80 \times 10^{157} u^{69} + \dots + 6.49 \times 10^{158} b + 1.67 \times 10^{158}, 3.34 \times 10^{158} u^{70} - 7.80 \times 10^{158} u^{69} + \dots + 6.49 \times 10^{158} a + 4.59 \times 10^{159}, u^{71} - 2u^{70} + \dots + 10u + 1 \rangle$$

(i) Arc colorings

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

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

$$a_{10} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.514154u^{70} + 1.20198u^{69} + \dots - 14.4737u - 7.07828 \\ 0.0633591u^{70} - 0.151068u^{69} + \dots + 3.49569u - 0.256975 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -0.573953u^{70} + 1.19350u^{69} + \dots - 13.1744u - 7.01032 \\ 0.0951502u^{70} - 0.228949u^{69} + \dots + 3.45444u - 0.317091 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.174897u^{70} - 0.472490u^{69} + \dots + 15.3667u + 5.67523 \\ -0.118550u^{70} + 0.321518u^{69} + \dots - 1.35288u + 0.169544 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.337748u^{70} + 0.603848u^{69} + \dots - 25.8435u + 0.618193 \\ -0.177165u^{70} + 0.217073u^{69} + \dots - 2.82251u - 0.449303 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0798159u^{70} - 0.254371u^{69} + \dots + 8.28970u + 3.25294 \\ u^3 - u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.293446u^{70} - 0.794009u^{69} + \dots + 16.7196u + 5.50568 \\ -0.118550u^{70} + 0.321518u^{69} + \dots - 1.35288u + 0.169544 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.360696u^{70} + 0.644610u^{69} + \dots - 4.30465u - 3.28034 \\ 0.0395576u^{70} - 0.0960173u^{69} + \dots + 2.98896u - 0.198923 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.360696u^{70} + 0.644610u^{69} + \dots - 4.30465u - 3.28034 \\ 0.0395576u^{70} - 0.0960173u^{69} + \dots + 2.98896u - 0.198923 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $3.60654u^{70} - 6.89818u^{69} + \dots - 6.61880u - 2.95587$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_4	$u^{71} - 7u^{70} + \dots - 3u + 1$
c_2, c_6	$u^{71} - u^{70} + \dots + 320u + 64$
c_5	$u^{71} + 6u^{70} + \dots + 2u + 1$
c_7, c_{10}	$u^{71} - 2u^{70} + \dots + 10u + 1$
c_8	$u^{71} - 6u^{70} + \dots - 3424u + 319$
c_9	$u^{71} - 2u^{70} + \dots + 35022u + 3953$
c_{11}	$u^{71} + 12u^{70} + \dots - 2u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4	$y^{71} - 67y^{70} + \dots - 45y - 1$
c_2, c_6	$y^{71} + 39y^{70} + \dots - 36864y - 4096$
c_5	$y^{71} + 12y^{70} + \dots - 6y - 1$
c_7, c_{10}	$y^{71} - 48y^{70} + \dots - 10y - 1$
c_8	$y^{71} - 72y^{70} + \dots + 3210942y - 101761$
c_9	$y^{71} - 48y^{70} + \dots - 314283574y - 15626209$
c_{11}	$y^{71} + 72y^{69} + \dots - 10y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.973828 + 0.280461I$ $a = -0.382377 + 0.191990I$ $b = 0.806691 - 0.545143I$	$0.16886 - 3.43064I$	0
$u = 0.973828 - 0.280461I$ $a = -0.382377 - 0.191990I$ $b = 0.806691 + 0.545143I$	$0.16886 + 3.43064I$	0
$u = -1.039510 + 0.064875I$ $a = 1.72385 - 3.92841I$ $b = 0.153087 - 0.345660I$	$-2.19246 + 1.77118I$	0
$u = -1.039510 - 0.064875I$ $a = 1.72385 + 3.92841I$ $b = 0.153087 + 0.345660I$	$-2.19246 - 1.77118I$	0
$u = -1.04817$ $a = 2.58690$ $b = 0.574511$	-4.26740	40.4800
$u = -0.093891 + 1.051200I$ $a = 0.826346 - 0.088868I$ $b = 1.35016 - 0.97545I$	$-2.29132 + 4.25686I$	0
$u = -0.093891 - 1.051200I$ $a = 0.826346 + 0.088868I$ $b = 1.35016 + 0.97545I$	$-2.29132 - 4.25686I$	0
$u = -1.051030 + 0.111007I$ $a = -4.50600 - 1.44719I$ $b = 1.07671 - 1.20500I$	$-3.57140 + 0.57623I$	0
$u = -1.051030 - 0.111007I$ $a = -4.50600 + 1.44719I$ $b = 1.07671 + 1.20500I$	$-3.57140 - 0.57623I$	0
$u = 1.080020 + 0.152289I$ $a = -0.273682 - 1.001120I$ $b = 0.031630 - 1.096560I$	$-2.62165 - 3.78828I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.080020 - 0.152289I$ $a = -0.273682 + 1.001120I$ $b = 0.031630 + 1.096560I$	$-2.62165 + 3.78828I$	0
$u = 0.202728 + 0.884593I$ $a = -0.558547 - 0.125884I$ $b = -0.708883 + 0.771941I$	$2.34440 + 1.95014I$	$4.45936 - 2.53493I$
$u = 0.202728 - 0.884593I$ $a = -0.558547 + 0.125884I$ $b = -0.708883 - 0.771941I$	$2.34440 - 1.95014I$	$4.45936 + 2.53493I$
$u = -1.043640 + 0.390448I$ $a = -0.683454 + 0.373591I$ $b = 0.003299 - 0.591740I$	$-1.92491 + 1.08364I$	0
$u = -1.043640 - 0.390448I$ $a = -0.683454 - 0.373591I$ $b = 0.003299 + 0.591740I$	$-1.92491 - 1.08364I$	0
$u = 0.599075 + 0.942927I$ $a = 0.393955 - 0.081858I$ $b = -0.131439 - 1.112940I$	$-1.031500 + 0.354146I$	0
$u = 0.599075 - 0.942927I$ $a = 0.393955 + 0.081858I$ $b = -0.131439 + 1.112940I$	$-1.031500 - 0.354146I$	0
$u = 1.119810 + 0.032767I$ $a = 0.413302 - 0.046036I$ $b = -1.43154 - 0.47309I$	$-5.71064 - 0.88851I$	0
$u = 1.119810 - 0.032767I$ $a = 0.413302 + 0.046036I$ $b = -1.43154 + 0.47309I$	$-5.71064 + 0.88851I$	0
$u = 1.117600 + 0.093371I$ $a = 0.678615 - 0.967658I$ $b = -0.93853 - 1.07438I$	$-4.60632 - 2.57396I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.117600 - 0.093371I$ $a = 0.678615 + 0.967658I$ $b = -0.93853 + 1.07438I$	$-4.60632 + 2.57396I$	0
$u = -1.126210 + 0.132843I$ $a = -1.08363 + 2.70605I$ $b = -0.254130 + 0.145869I$	$-8.04028 + 4.80757I$	0
$u = -1.126210 - 0.132843I$ $a = -1.08363 - 2.70605I$ $b = -0.254130 - 0.145869I$	$-8.04028 - 4.80757I$	0
$u = -0.004277 + 1.135740I$ $a = 1.65575 + 0.09224I$ $b = 2.85653 + 0.65690I$	$0.43763 + 6.35749I$	0
$u = -0.004277 - 1.135740I$ $a = 1.65575 - 0.09224I$ $b = 2.85653 - 0.65690I$	$0.43763 - 6.35749I$	0
$u = -0.116710 + 0.856297I$ $a = -1.89294 + 0.32292I$ $b = -2.33201 - 0.18461I$	$-1.12559 + 1.87856I$	$-4.53889 - 4.17402I$
$u = -0.116710 - 0.856297I$ $a = -1.89294 - 0.32292I$ $b = -2.33201 + 0.18461I$	$-1.12559 - 1.87856I$	$-4.53889 + 4.17402I$
$u = 0.987158 + 0.647225I$ $a = -0.078094 - 0.228604I$ $b = -0.086973 + 0.620891I$	$-2.28261 - 6.08346I$	0
$u = 0.987158 - 0.647225I$ $a = -0.078094 + 0.228604I$ $b = -0.086973 - 0.620891I$	$-2.28261 + 6.08346I$	0
$u = -0.794072 + 0.043433I$ $a = -0.28211 + 1.87433I$ $b = -0.540687 - 0.121257I$	$-1.42339 + 1.14206I$	$-7.64564 - 4.36852I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.794072 - 0.043433I$ $a = -0.28211 - 1.87433I$ $b = -0.540687 + 0.121257I$	$-1.42339 - 1.14206I$	$-7.64564 + 4.36852I$
$u = 1.192200 + 0.296593I$ $a = 0.317333 + 1.101890I$ $b = 0.334681 + 0.650646I$	$-8.79734 - 8.72585I$	0
$u = 1.192200 - 0.296593I$ $a = 0.317333 - 1.101890I$ $b = 0.334681 - 0.650646I$	$-8.79734 + 8.72585I$	0
$u = -0.670063 + 0.347596I$ $a = -0.08138 + 1.61220I$ $b = 0.355159 - 0.164091I$	$-6.99999 - 3.26565I$	$-6.82531 + 6.65441I$
$u = -0.670063 - 0.347596I$ $a = -0.08138 - 1.61220I$ $b = 0.355159 + 0.164091I$	$-6.99999 + 3.26565I$	$-6.82531 - 6.65441I$
$u = -0.645193 + 1.117580I$ $a = 1.213880 - 0.359050I$ $b = 1.77925 + 1.40756I$	$-7.91168 + 0.39314I$	0
$u = -0.645193 - 1.117580I$ $a = 1.213880 + 0.359050I$ $b = 1.77925 - 1.40756I$	$-7.91168 - 0.39314I$	0
$u = 1.200010 + 0.496938I$ $a = 0.218730 + 0.009510I$ $b = -0.699809 - 0.172100I$	$-0.76386 - 6.94431I$	0
$u = 1.200010 - 0.496938I$ $a = 0.218730 - 0.009510I$ $b = -0.699809 + 0.172100I$	$-0.76386 + 6.94431I$	0
$u = 0.003290 + 1.307520I$ $a = -1.45978 - 0.16433I$ $b = -2.98943 - 0.91001I$	$-5.26918 + 10.31530I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.003290 - 1.307520I$ $a = -1.45978 + 0.16433I$ $b = -2.98943 + 0.91001I$	$-5.26918 - 10.31530I$	0
$u = 0.452314 + 0.404120I$ $a = -0.369574 + 0.466412I$ $b = 0.728049 + 0.140839I$	$1.57443 + 0.30385I$	$7.03884 + 0.55864I$
$u = 0.452314 - 0.404120I$ $a = -0.369574 - 0.466412I$ $b = 0.728049 - 0.140839I$	$1.57443 - 0.30385I$	$7.03884 - 0.55864I$
$u = 1.328370 + 0.443679I$ $a = 0.18921 - 1.90014I$ $b = -2.43997 - 0.05463I$	$-5.52892 - 6.64078I$	0
$u = 1.328370 - 0.443679I$ $a = 0.18921 + 1.90014I$ $b = -2.43997 + 0.05463I$	$-5.52892 + 6.64078I$	0
$u = 1.41902 + 0.24540I$ $a = -0.31463 + 1.40902I$ $b = 1.50742 - 0.01617I$	$-14.7704 - 4.4090I$	0
$u = 1.41902 - 0.24540I$ $a = -0.31463 - 1.40902I$ $b = 1.50742 + 0.01617I$	$-14.7704 + 4.4090I$	0
$u = 1.36179 + 0.48894I$ $a = -0.271842 - 0.047925I$ $b = 1.037440 + 0.370809I$	$-6.81481 - 9.66907I$	0
$u = 1.36179 - 0.48894I$ $a = -0.271842 + 0.047925I$ $b = 1.037440 - 0.370809I$	$-6.81481 + 9.66907I$	0
$u = 1.36248 + 0.53740I$ $a = 0.15951 + 1.89725I$ $b = 2.64476 - 0.38758I$	$-3.85560 - 12.20440I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.36248 - 0.53740I$ $a = 0.15951 - 1.89725I$ $b = 2.64476 + 0.38758I$	$-3.85560 + 12.20440I$	0
$u = 0.019457 + 0.498656I$ $a = 2.06316 - 1.12594I$ $b = 0.125101 - 0.377825I$	$-5.36921 + 5.60292I$	$-4.23205 - 1.95004I$
$u = 0.019457 - 0.498656I$ $a = 2.06316 + 1.12594I$ $b = 0.125101 + 0.377825I$	$-5.36921 - 5.60292I$	$-4.23205 + 1.95004I$
$u = -1.35931 + 0.64552I$ $a = -0.08241 + 1.81423I$ $b = -3.25610 - 0.21443I$	$-4.09299 + 4.00272I$	0
$u = -1.35931 - 0.64552I$ $a = -0.08241 - 1.81423I$ $b = -3.25610 + 0.21443I$	$-4.09299 - 4.00272I$	0
$u = -1.45782 + 0.39176I$ $a = -0.64419 - 1.79501I$ $b = 2.93443 + 0.40813I$	$-4.54539 - 0.34097I$	0
$u = -1.45782 - 0.39176I$ $a = -0.64419 + 1.79501I$ $b = 2.93443 - 0.40813I$	$-4.54539 + 0.34097I$	0
$u = -1.42285 + 0.53580I$ $a = 0.953468 - 0.520457I$ $b = -0.57598 + 1.65551I$	$-6.35450 + 1.85292I$	0
$u = -1.42285 - 0.53580I$ $a = 0.953468 + 0.520457I$ $b = -0.57598 - 1.65551I$	$-6.35450 - 1.85292I$	0
$u = 1.41471 + 0.59221I$ $a = -0.31168 - 1.72898I$ $b = -2.57738 + 0.66185I$	$-9.7419 - 16.8559I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.41471 - 0.59221I$ $a = -0.31168 + 1.72898I$ $b = -2.57738 - 0.66185I$	$-9.7419 + 16.8559I$	0
$u = -0.230568 + 0.263555I$ $a = -2.27801 + 1.97060I$ $b = -0.913442 + 0.373094I$	$-1.31227 + 1.35935I$	$-5.28068 - 4.63416I$
$u = -0.230568 - 0.263555I$ $a = -2.27801 - 1.97060I$ $b = -0.913442 - 0.373094I$	$-1.31227 - 1.35935I$	$-5.28068 + 4.63416I$
$u = -1.45197 + 0.82397I$ $a = 0.15600 - 1.43654I$ $b = 3.48750 + 0.15031I$	$-10.25460 + 7.45224I$	0
$u = -1.45197 - 0.82397I$ $a = 0.15600 + 1.43654I$ $b = 3.48750 - 0.15031I$	$-10.25460 - 7.45224I$	0
$u = -1.71685 + 0.37143I$ $a = 0.56832 + 1.29788I$ $b = -3.07440 - 0.93374I$	$-11.03720 - 3.15602I$	0
$u = -1.71685 - 0.37143I$ $a = 0.56832 - 1.29788I$ $b = -3.07440 + 0.93374I$	$-11.03720 + 3.15602I$	0
$u = 0.039727 + 0.221588I$ $a = -3.96929 + 1.74892I$ $b = 0.178650 + 0.492128I$	$-0.04861 + 2.05474I$	$-0.05845 - 2.58157I$
$u = 0.039727 - 0.221588I$ $a = -3.96929 - 1.74892I$ $b = 0.178650 - 0.492128I$	$-0.04861 - 2.05474I$	$-0.05845 + 2.58157I$
$u = -0.125529 + 0.098090I$ $a = -5.80125 - 1.46490I$ $b = -0.727087 + 0.471790I$	$-2.61258 + 0.40782I$	$-2.91513 + 1.25335I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.125529 - 0.098090I$		
$a = -5.80125 + 1.46490I$	$-2.61258 - 0.40782I$	$-2.91513 - 1.25335I$
$b = -0.727087 - 0.471790I$		

II.

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

(i) Arc colorings

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

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

$$a_{10} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

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

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

$$a_2 = \begin{pmatrix} u^5 - u^4 + u^2 - u + 1 \\ u^3 - u^2 + 1 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

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

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

$$a_4 = \begin{pmatrix} u^5 - u^4 + u^3 + u^2 - u + 1 \\ -u^2 + u + 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^5 - u^4 + u^3 + u^2 - u + 1 \\ -u^2 + u + 1 \end{pmatrix}$$

(ii) Obstruction class = 1

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

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.002190 + 0.295542I$		
$a = 2.25915 + 1.43225I$	$-3.53554 + 0.92430I$	$-6.82874 - 7.13914I$
$b = -0.66103 + 1.45708I$		
$u = -1.002190 - 0.295542I$		
$a = 2.25915 - 1.43225I$	$-3.53554 - 0.92430I$	$-6.82874 + 7.13914I$
$b = -0.66103 - 1.45708I$		
$u = 0.428243 + 0.664531I$		
$a = 0.655968 - 0.098281I$	$0.245672 + 0.924305I$	$1.12292 - 1.33143I$
$b = 0.769407 - 0.497010I$		
$u = 0.428243 - 0.664531I$		
$a = 0.655968 + 0.098281I$	$0.245672 - 0.924305I$	$1.12292 + 1.33143I$
$b = 0.769407 + 0.497010I$		
$u = 1.073950 + 0.558752I$		
$a = -0.415113 + 0.381252I$	$-1.64493 - 5.69302I$	$-0.29418 + 2.69056I$
$b = 0.391622 + 0.558752I$		
$u = 1.073950 - 0.558752I$		
$a = -0.415113 - 0.381252I$	$-1.64493 + 5.69302I$	$-0.29418 - 2.69056I$
$b = 0.391622 - 0.558752I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^6)(u^{71} - 7u^{70} + \dots - 3u + 1)$
c_2, c_6	$u^6(u^{71} - u^{70} + \dots + 320u + 64)$
c_3, c_4	$((u+1)^6)(u^{71} - 7u^{70} + \dots - 3u + 1)$
c_5	$(u^6 + 3u^5 + 5u^4 + 4u^3 + 2u^2 + u + 1)(u^{71} + 6u^{70} + \dots + 2u + 1)$
c_7	$(u^6 + u^5 - u^4 - 2u^3 + u + 1)(u^{71} - 2u^{70} + \dots + 10u + 1)$
c_8	$(u^6 + 3u^5 + 5u^4 + 4u^3 + 2u^2 + u + 1)(u^{71} - 6u^{70} + \dots - 3424u + 319)$
c_9	$(u^6 + u^5 - u^4 - 2u^3 + u + 1)(u^{71} - 2u^{70} + \dots + 35022u + 3953)$
c_{10}	$(u^6 - u^5 - u^4 + 2u^3 - u + 1)(u^{71} - 2u^{70} + \dots + 10u + 1)$
c_{11}	$(u^6 + u^5 - u^4 - 2u^3 + u + 1)(u^{71} + 12u^{70} + \dots - 2u - 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4	$((y-1)^6)(y^{71} - 67y^{70} + \dots - 45y - 1)$
c_2, c_6	$y^6(y^{71} + 39y^{70} + \dots - 36864y - 4096)$
c_5	$(y^6 + y^5 + 5y^4 + 6y^2 + 3y + 1)(y^{71} + 12y^{70} + \dots - 6y - 1)$
c_7, c_{10}	$(y^6 - 3y^5 + 5y^4 - 4y^3 + 2y^2 - y + 1)(y^{71} - 48y^{70} + \dots - 10y - 1)$
c_8	$(y^6 + y^5 + 5y^4 + 6y^2 + 3y + 1)$ $\cdot (y^{71} - 72y^{70} + \dots + 3210942y - 101761)$
c_9	$(y^6 - 3y^5 + 5y^4 - 4y^3 + 2y^2 - y + 1)$ $\cdot (y^{71} - 48y^{70} + \dots - 314283574y - 15626209)$
c_{11}	$(y^6 - 3y^5 + 5y^4 - 4y^3 + 2y^2 - y + 1)(y^{71} + 72y^{69} + \dots - 10y - 1)$