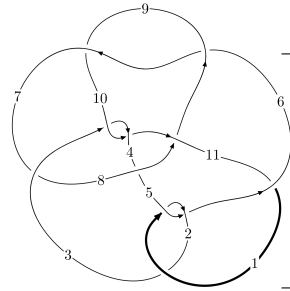
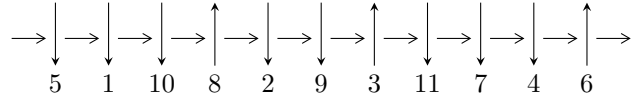


11a₁₂₇ (K11a₁₂₇)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -1.48129 \times 10^{37} u^{70} - 2.24416 \times 10^{37} u^{69} + \dots + 2.11503 \times 10^{37} b + 2.31427 \times 10^{37}, \\ 1.02558 \times 10^{37} u^{70} + 1.31834 \times 10^{37} u^{69} + \dots + 9.61375 \times 10^{36} a - 1.17173 \times 10^{37}, u^{71} + 2u^{70} + \dots - 2u - 1 \rangle \\ I_2^u = \langle b, 3u^2 + 5a - 7u + 6, u^3 - u^2 + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 74 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.

$$I_1^u = \langle -1.48 \times 10^{37} u^{70} - 2.24 \times 10^{37} u^{69} + \dots + 2.12 \times 10^{37} b + 2.31 \times 10^{37}, 1.03 \times 10^{37} u^{70} + 1.32 \times 10^{37} u^{69} + \dots + 9.61 \times 10^{36} a - 1.17 \times 10^{37}, u^{71} + 2u^{70} + \dots - 2u - 1 \rangle$$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^3 \\ -u^3 + u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -1.06678u^{70} - 1.37130u^{69} + \dots + 3.23612u + 1.21881 \\ 0.700363u^{70} + 1.06106u^{69} + \dots - 0.692179u - 1.09420 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -2.15925u^{70} - 2.76790u^{69} + \dots + 1.95352u + 2.23161 \\ -0.0889259u^{70} - 0.0397494u^{69} + \dots + 0.558128u - 0.272953 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.0510485u^{70} - 0.373547u^{69} + \dots + 2.27625u + 0.706786 \\ 1.65193u^{70} + 2.44250u^{69} + \dots - 2.69769u - 2.53117 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -1.48850u^{70} - 2.21759u^{69} + \dots + 3.68765u + 1.74401 \\ 0.992194u^{70} + 1.60425u^{69} + \dots - 2.38134u - 1.45862 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 2.15925u^{70} + 2.76790u^{69} + \dots - 1.95352u - 2.23161 \\ 1.20977u^{70} + 1.41960u^{69} + \dots - 0.383830u - 1.82356 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 2.15925u^{70} + 2.76790u^{69} + \dots - 1.95352u - 2.23161 \\ 1.20977u^{70} + 1.41960u^{69} + \dots - 0.383830u - 1.82356 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $0.637188u^{70} + 2.00147u^{69} + \dots + 4.31419u - 9.38239$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{71} + 2u^{70} + \dots - 2u - 1$
c_2	$u^{71} + 36u^{70} + \dots + 4u + 1$
c_3, c_{10}	$u^{71} + 2u^{70} + \dots - 4u - 1$
c_4	$u^{71} - 3u^{70} + \dots + 660u + 200$
c_6, c_9	$u^{71} - 4u^{70} + \dots + 21u - 25$
c_7	$5(5u^{71} - 39u^{70} + \dots + 379583u + 94103)$
c_8	$5(5u^{71} - 6u^{70} + \dots + 231980u - 42881)$
c_{11}	$u^{71} + 6u^{70} + \dots - 6402u - 847$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{71} - 36y^{70} + \dots + 4y - 1$
c_2	$y^{71} + 72y^{69} + \dots + 16y - 1$
c_3, c_{10}	$y^{71} - 48y^{70} + \dots + 4y - 1$
c_4	$y^{71} + 21y^{70} + \dots - 606000y - 40000$
c_6, c_9	$y^{71} - 58y^{70} + \dots + 79841y - 625$
c_7	$25(25y^{71} + 959y^{70} + \dots - 1.81656 \times 10^{11}y - 8.85537 \times 10^9)$
c_8	$25(25y^{71} - 936y^{70} + \dots + 3.67278 \times 10^{10}y - 1.83878 \times 10^9)$
c_{11}	$y^{71} + 36y^{70} + \dots + 22222860y - 717409$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.756248 + 0.731356I$ $a = -0.319350 - 0.556979I$ $b = -0.609727 + 0.867860I$	$-4.07719 - 3.90151I$	$-5.00000 + 3.54699I$
$u = -0.756248 - 0.731356I$ $a = -0.319350 + 0.556979I$ $b = -0.609727 - 0.867860I$	$-4.07719 + 3.90151I$	$-5.00000 - 3.54699I$
$u = -0.815711 + 0.480281I$ $a = 0.851857 + 0.985100I$ $b = 0.795395 - 0.523783I$	$-0.567421 - 0.429034I$	$-3.85529 - 0.87645I$
$u = -0.815711 - 0.480281I$ $a = 0.851857 - 0.985100I$ $b = 0.795395 + 0.523783I$	$-0.567421 + 0.429034I$	$-3.85529 + 0.87645I$
$u = -0.270630 + 0.894068I$ $a = -0.243231 + 0.020060I$ $b = -0.051628 - 0.966961I$	$-7.01345 + 0.86966I$	$-12.36097 - 1.34990I$
$u = -0.270630 - 0.894068I$ $a = -0.243231 - 0.020060I$ $b = -0.051628 + 0.966961I$	$-7.01345 - 0.86966I$	$-12.36097 + 1.34990I$
$u = 0.916597 + 0.577342I$ $a = 0.034897 - 0.799407I$ $b = 0.811438 + 0.019369I$	$1.66910 - 3.91281I$	0
$u = 0.916597 - 0.577342I$ $a = 0.034897 + 0.799407I$ $b = 0.811438 - 0.019369I$	$1.66910 + 3.91281I$	0
$u = -0.836576 + 0.691781I$ $a = -0.894496 + 0.459599I$ $b = 0.799336 + 0.956428I$	$-4.32946 + 9.25395I$	0
$u = -0.836576 - 0.691781I$ $a = -0.894496 - 0.459599I$ $b = 0.799336 - 0.956428I$	$-4.32946 - 9.25395I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.222287 + 0.874807I$		
$a = -0.288795 + 0.326260I$	$-2.91874 + 5.72330I$	$-6.82100 - 5.17076I$
$b = 0.664290 + 0.919235I$		
$u = 0.222287 - 0.874807I$		
$a = -0.288795 - 0.326260I$	$-2.91874 - 5.72330I$	$-6.82100 + 5.17076I$
$b = 0.664290 - 0.919235I$		
$u = -0.730824 + 0.527079I$		
$a = 0.753832 - 0.354136I$	$-0.33023 + 4.59723I$	$-4.06867 - 6.98717I$
$b = -0.968868 - 0.896754I$		
$u = -0.730824 - 0.527079I$		
$a = 0.753832 + 0.354136I$	$-0.33023 - 4.59723I$	$-4.06867 + 6.98717I$
$b = -0.968868 + 0.896754I$		
$u = 0.852440 + 0.278118I$		
$a = -0.491553 + 0.803598I$	$-4.80199 - 3.21094I$	$-12.45295 + 5.85076I$
$b = 0.441660 + 1.237110I$		
$u = 0.852440 - 0.278118I$		
$a = -0.491553 - 0.803598I$	$-4.80199 + 3.21094I$	$-12.45295 - 5.85076I$
$b = 0.441660 - 1.237110I$		
$u = -0.234589 + 0.853865I$		
$a = -0.554053 - 0.463968I$	$-7.77113 - 11.46490I$	$-8.41846 + 5.96289I$
$b = 1.02317 - 1.27672I$		
$u = -0.234589 - 0.853865I$		
$a = -0.554053 + 0.463968I$	$-7.77113 + 11.46490I$	$-8.41846 - 5.96289I$
$b = 1.02317 + 1.27672I$		
$u = 0.640616 + 0.584471I$		
$a = 0.569021 + 0.397714I$	$2.46408 - 0.68931I$	$1.74747 + 0.77475I$
$b = -0.836952 + 0.262697I$		
$u = 0.640616 - 0.584471I$		
$a = 0.569021 - 0.397714I$	$2.46408 + 0.68931I$	$1.74747 - 0.77475I$
$b = -0.836952 - 0.262697I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.859660$ $a = -0.477948$ $b = 1.49255$	-6.41668	-15.8580
$u = -1.099450 + 0.364554I$ $a = 0.87164 - 1.32285I$ $b = 0.420596 - 0.906615I$	$-2.63013 + 1.09669I$	0
$u = -1.099450 - 0.364554I$ $a = 0.87164 + 1.32285I$ $b = 0.420596 + 0.906615I$	$-2.63013 - 1.09669I$	0
$u = 1.087730 + 0.413641I$ $a = -1.09893 + 2.35531I$ $b = 0.001207 + 0.597493I$	$-5.31037 - 3.59883I$	0
$u = 1.087730 - 0.413641I$ $a = -1.09893 - 2.35531I$ $b = 0.001207 - 0.597493I$	$-5.31037 + 3.59883I$	0
$u = 0.862289 + 0.799421I$ $a = -0.285568 - 0.061148I$ $b = 0.121059 - 0.469128I$	$1.15814 - 2.98237I$	0
$u = 0.862289 - 0.799421I$ $a = -0.285568 + 0.061148I$ $b = 0.121059 + 0.469128I$	$1.15814 + 2.98237I$	0
$u = 1.145320 + 0.357313I$ $a = 1.92585 + 1.99482I$ $b = 0.70820 + 1.75526I$	$-6.26433 + 2.00466I$	0
$u = 1.145320 - 0.357313I$ $a = 1.92585 - 1.99482I$ $b = 0.70820 - 1.75526I$	$-6.26433 - 2.00466I$	0
$u = 1.130980 + 0.431488I$ $a = 0.67778 + 1.92019I$ $b = -0.795242 + 0.439034I$	$-5.35777 - 2.76405I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.130980 - 0.431488I$ $a = 0.67778 - 1.92019I$ $b = -0.795242 - 0.439034I$	$-5.35777 + 2.76405I$	0
$u = -1.115380 + 0.489220I$ $a = -1.63469 + 1.22563I$ $b = 0.059678 + 0.565014I$	$-4.70142 + 3.83162I$	0
$u = -1.115380 - 0.489220I$ $a = -1.63469 - 1.22563I$ $b = 0.059678 - 0.565014I$	$-4.70142 - 3.83162I$	0
$u = -1.137430 + 0.466202I$ $a = -0.643935 + 0.898772I$ $b = -0.720960 + 0.704286I$	$-5.10323 + 5.09404I$	0
$u = -1.137430 - 0.466202I$ $a = -0.643935 - 0.898772I$ $b = -0.720960 - 0.704286I$	$-5.10323 - 5.09404I$	0
$u = -1.162180 + 0.422674I$ $a = -0.53999 - 3.04221I$ $b = -1.93986 - 1.22986I$	$-10.03050 + 1.73926I$	0
$u = -1.162180 - 0.422674I$ $a = -0.53999 + 3.04221I$ $b = -1.93986 + 1.22986I$	$-10.03050 - 1.73926I$	0
$u = 1.131850 + 0.517529I$ $a = -0.60956 - 1.99402I$ $b = 0.809979 - 0.884446I$	$-1.51520 - 6.56162I$	0
$u = 1.131850 - 0.517529I$ $a = -0.60956 + 1.99402I$ $b = 0.809979 + 0.884446I$	$-1.51520 + 6.56162I$	0
$u = -0.201597 + 0.723825I$ $a = 0.407018 + 0.472911I$ $b = -0.99003 + 1.51453I$	$-2.41749 - 5.42731I$	$-7.02359 + 6.01187I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.201597 - 0.723825I$ $a = 0.407018 - 0.472911I$ $b = -0.99003 - 1.51453I$	$-2.41749 + 5.42731I$	$-7.02359 - 6.01187I$
$u = 1.163000 + 0.468877I$ $a = -2.63024 - 0.30133I$ $b = -1.65868 - 1.64014I$	$-9.70369 - 6.52499I$	0
$u = 1.163000 - 0.468877I$ $a = -2.63024 + 0.30133I$ $b = -1.65868 + 1.64014I$	$-9.70369 + 6.52499I$	0
$u = -0.686936 + 0.290469I$ $a = 0.31194 - 1.46125I$ $b = 0.142451 - 0.714960I$	$-1.21269 + 1.32793I$	$-6.02554 - 4.52788I$
$u = -0.686936 - 0.290469I$ $a = 0.31194 + 1.46125I$ $b = 0.142451 + 0.714960I$	$-1.21269 - 1.32793I$	$-6.02554 + 4.52788I$
$u = -1.152790 + 0.514748I$ $a = -0.96659 + 2.88563I$ $b = 1.14061 + 1.68141I$	$-5.16670 + 10.10120I$	0
$u = -1.152790 - 0.514748I$ $a = -0.96659 - 2.88563I$ $b = 1.14061 - 1.68141I$	$-5.16670 - 10.10120I$	0
$u = -0.736745$ $a = 1.06563$ $b = 0.319467$	-1.23735	-7.42040
$u = 0.254623 + 0.682236I$ $a = 0.490596 - 0.464241I$ $b = -0.733828 - 0.705892I$	$1.01632 + 1.94893I$	$-0.27362 - 2.41499I$
$u = 0.254623 - 0.682236I$ $a = 0.490596 + 0.464241I$ $b = -0.733828 + 0.705892I$	$1.01632 - 1.94893I$	$-0.27362 + 2.41499I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.237750 + 0.293203I$ $a = -1.24533 - 1.57655I$ $b = -0.89711 - 1.37506I$	$-12.4694 + 7.7567I$	0
$u = 1.237750 - 0.293203I$ $a = -1.24533 + 1.57655I$ $b = -0.89711 + 1.37506I$	$-12.4694 - 7.7567I$	0
$u = 1.253530 + 0.263632I$ $a = 0.02040 - 1.47913I$ $b = 0.199889 - 1.201490I$	$-12.02620 - 4.54379I$	0
$u = 1.253530 - 0.263632I$ $a = 0.02040 + 1.47913I$ $b = 0.199889 + 1.201490I$	$-12.02620 + 4.54379I$	0
$u = -1.256850 + 0.294449I$ $a = -0.74295 + 1.21599I$ $b = -0.466074 + 1.044560I$	$-7.69010 - 1.87443I$	0
$u = -1.256850 - 0.294449I$ $a = -0.74295 - 1.21599I$ $b = -0.466074 - 1.044560I$	$-7.69010 + 1.87443I$	0
$u = 0.066183 + 0.695054I$ $a = -0.405710 - 0.249698I$ $b = 1.56121 - 1.32211I$	$-6.61162 + 2.20383I$	$-12.68569 - 3.07320I$
$u = 0.066183 - 0.695054I$ $a = -0.405710 + 0.249698I$ $b = 1.56121 + 1.32211I$	$-6.61162 - 2.20383I$	$-12.68569 + 3.07320I$
$u = -1.186700 + 0.559365I$ $a = 0.89022 - 2.40681I$ $b = -1.10234 - 1.33333I$	$-10.6184 + 16.6559I$	0
$u = -1.186700 - 0.559365I$ $a = 0.89022 + 2.40681I$ $b = -1.10234 + 1.33333I$	$-10.6184 - 16.6559I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.196320 + 0.559287I$ $a = 0.61509 + 1.75869I$ $b = -0.769209 + 1.018600I$	$-5.84600 - 10.96250I$	0
$u = 1.196320 - 0.559287I$ $a = 0.61509 - 1.75869I$ $b = -0.769209 - 1.018600I$	$-5.84600 + 10.96250I$	0
$u = -1.198020 + 0.580415I$ $a = 1.025910 - 0.879632I$ $b = -0.129045 - 1.023280I$	$-9.82778 + 4.53798I$	0
$u = -1.198020 - 0.580415I$ $a = 1.025910 + 0.879632I$ $b = -0.129045 + 1.023280I$	$-9.82778 - 4.53798I$	0
$u = 0.654099$ $a = -2.68619$ $b = 0.513194$	-2.37176	2.33790
$u = -0.198330 + 0.594187I$ $a = 1.51239 + 0.35999I$ $b = 0.082687 + 0.549338I$	$-2.17011 + 0.43018I$	$-7.12298 + 0.05912I$
$u = -0.198330 - 0.594187I$ $a = 1.51239 - 0.35999I$ $b = 0.082687 - 0.549338I$	$-2.17011 - 0.43018I$	$-7.12298 - 0.05912I$
$u = -0.083118 + 0.598548I$ $a = -0.90282 + 1.22203I$ $b = 0.575442 + 0.552054I$	$-2.24291 - 0.96732I$	$-4.89699 - 0.16722I$
$u = -0.083118 - 0.598548I$ $a = -0.90282 - 1.22203I$ $b = 0.575442 - 0.552054I$	$-2.24291 + 0.96732I$	$-4.89699 + 0.16722I$
$u = 0.432980 + 0.381803I$ $a = 6.48861 + 2.17280I$ $b = -0.351355 + 0.254773I$	$-3.41757 + 0.22703I$	$4.7786 + 20.3751I$

	Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$0.432980 - 0.381803I$		
$a =$	$6.48861 - 2.17280I$	$-3.41757 - 0.22703I$	$4.7786 - 20.3751I$
$b =$	$-0.351355 - 0.254773I$		

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

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_6 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u \\ u \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} -\frac{3}{5}u^2 + \frac{7}{5}u - \frac{6}{5} \\ 0 \end{pmatrix}$$

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

$$a_7 = \begin{pmatrix} -\frac{2}{5}u^2 + \frac{8}{5}u - \frac{4}{5} \\ \frac{2}{5}u^2 + \frac{2}{5}u - \frac{1}{5} \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} -\frac{2}{5}u^2 + \frac{8}{5}u - \frac{6}{5} \\ -\frac{3}{5}u^2 + \frac{2}{5}u - \frac{1}{5} \end{pmatrix}$$

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

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

(ii) Obstruction class = 1

$$\text{(iii) Cusp Shapes} = -\frac{277}{25}u^2 + \frac{293}{25}u - \frac{119}{25}$$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^3 - y^2 + 2y - 1$
c_2, c_3, c_{10}	$y^3 + 3y^2 + 2y - 1$
c_4	y^3
c_6, c_9	$(y - 1)^3$
c_7	$25(25y^3 - 6y^2 - 7y - 1)$
c_8	$25(25y^3 - 61y^2 + 14y - 1)$
c_{11}	$y^3 - 5y^2 + 10y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$ $a = -0.100634 + 0.258522I$ $b = 0$	$1.37919 - 2.82812I$	$3.14050 - 5.75335I$
$u = 0.877439 - 0.744862I$ $a = -0.100634 - 0.258522I$ $b = 0$	$1.37919 + 2.82812I$	$3.14050 + 5.75335I$
$u = -0.754878$ $a = -2.59873$ $b = 0$	-2.75839	-19.9210

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^3 + u^2 - 1)(u^{71} + 2u^{70} + \dots - 2u - 1)$
c_2	$(u^3 + u^2 + 2u + 1)(u^{71} + 36u^{70} + \dots + 4u + 1)$
c_3	$(u^3 + u^2 + 2u + 1)(u^{71} + 2u^{70} + \dots - 4u - 1)$
c_4	$u^3(u^{71} - 3u^{70} + \dots + 660u + 200)$
c_5	$(u^3 - u^2 + 1)(u^{71} + 2u^{70} + \dots - 2u - 1)$
c_6	$((u - 1)^3)(u^{71} - 4u^{70} + \dots + 21u - 25)$
c_7	$25(5u^3 - 4u^2 + u - 1)(5u^{71} - 39u^{70} + \dots + 379583u + 94103)$
c_8	$25(5u^3 - 11u^2 + 6u - 1)(5u^{71} - 6u^{70} + \dots + 231980u - 42881)$
c_9	$((u + 1)^3)(u^{71} - 4u^{70} + \dots + 21u - 25)$
c_{10}	$(u^3 - u^2 + 2u - 1)(u^{71} + 2u^{70} + \dots - 4u - 1)$
c_{11}	$(u^3 + 3u^2 + 2u - 1)(u^{71} + 6u^{70} + \dots - 6402u - 847)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^3 - y^2 + 2y - 1)(y^{71} - 36y^{70} + \dots + 4y - 1)$
c_2	$(y^3 + 3y^2 + 2y - 1)(y^{71} + 72y^{69} + \dots + 16y - 1)$
c_3, c_{10}	$(y^3 + 3y^2 + 2y - 1)(y^{71} - 48y^{70} + \dots + 4y - 1)$
c_4	$y^3(y^{71} + 21y^{70} + \dots - 606000y - 40000)$
c_6, c_9	$((y - 1)^3)(y^{71} - 58y^{70} + \dots + 79841y - 625)$
c_7	$625(25y^3 - 6y^2 - 7y - 1)$ $\cdot (25y^{71} + 959y^{70} + \dots - 181655598053y - 8855374609)$
c_8	$625(25y^3 - 61y^2 + 14y - 1)$ $\cdot (25y^{71} - 936y^{70} + \dots + 36727842568y - 1838780161)$
c_{11}	$(y^3 - 5y^2 + 10y - 1)(y^{71} + 36y^{70} + \dots + 2.22229 \times 10^7 y - 717409)$