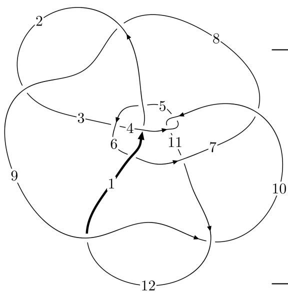
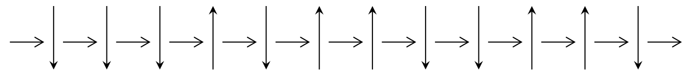
$12n_{0870}$ ($K12n_{0870}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

$9{,}12 \xrightarrow[c_9]{} 4{,}10 \xrightarrow[c_4]{} 5 \xrightarrow[c_{12}]{} 1 \xrightarrow[c_1]{} 2 \xrightarrow[c_5]{} 6 \xrightarrow[c_3]{} 3 \xrightarrow[c_8]{} 8 \xrightarrow[c_7]{} 7 \xrightarrow[c_{11}]{} 11 \twoheadrightarrow c_2, c_6, c_{10}$

Ideals for irreducible components[2] of $X_{\mathbf{par}}$

$$I_1^u = \langle -9.00164\times 10^{56}u^{36} - 3.79644\times 10^{57}u^{35} + \cdots + 2.25166\times 10^{59}b - 2.70335\times 10^{59},$$
$$3.91048\times 10^{57}u^{36} + 9.08535\times 10^{57}u^{35} + \cdots + 6.75498\times 10^{59}a - 7.61995\times 10^{59},\ u^{37} + 3u^{36} + \cdots + 27u +$$
$$I_2^u = \langle -1131323800u^{24} + 8093044710u^{23} + \cdots + 3924483813b + 3811509091,$$
$$6486714421u^{24} - 23913418584u^{23} + \cdots + 3924483813a + 14656680362,$$
$$u^{25} - 4u^{24} + \cdots - 9u + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 62 representations.

[1] The 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`).

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

I. $I_1^u = \langle -9.00 \times 10^{56}u^{36} - 3.80 \times 10^{57}u^{35} + \cdots + 2.25 \times 10^{59}b - 2.70 \times 10^{59},\ 3.91 \times 10^{57}u^{36} + 9.09 \times 10^{57}u^{35} + \cdots + 6.75 \times 10^{59}a - 7.62 \times 10^{59},\ u^{37} + 3u^{36} + \cdots + 27u + 27\rangle$

(i) Arc colorings

$$a_9 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-0.00578904u^{36} - 0.0134499u^{35} + \cdots - 3.92304u + 1.12805\\0.00399778u^{36} + 0.0168606u^{35} + \cdots - 0.325413u + 1.20060\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-0.000411239u^{36} + 0.00236692u^{35} + \cdots - 4.29899u + 2.43442\\0.00328021u^{36} + 0.0148958u^{35} + \cdots - 0.462065u + 1.20915\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-0.0189562u^{36} - 0.0588044u^{35} + \cdots - 1.78606u - 1.25542\\-0.00948539u^{36} - 0.0280353u^{35} + \cdots - 3.10510u - 0.162459\end{pmatrix}$$
$$a_6 = \begin{pmatrix}0.0309726u^{36} + 0.0803799u^{35} + \cdots + 6.68023u - 0.585521\\-0.00665213u^{36} - 0.0225712u^{35} + \cdots + 0.785980u - 1.34064\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-0.00947083u^{36} - 0.0307691u^{35} + \cdots + 1.31904u - 1.09296\\-0.00948539u^{36} - 0.0280353u^{35} + \cdots - 3.10510u - 0.162459\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-0.0288137u^{36} - 0.0681602u^{35} + \cdots - 7.98371u + 2.22311\\0.00233006u^{36} + 0.00798065u^{35} + \cdots - 1.26663u + 1.55312\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-0.0301650u^{36} - 0.0794968u^{35} + \cdots - 6.43270u + 0.176402\\0.00584456u^{36} + 0.0216881u^{35} + \cdots - 1.03351u + 1.74976\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}0.0207989u^{36} + 0.0467173u^{35} + \cdots + 6.44147u - 1.65281\\-0.0128462u^{36} - 0.0354139u^{35} + \cdots - 0.0326585u - 1.80165\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.0119190u^{36} + 0.0677566u^{35} + \cdots - 7.20128u - 2.71469$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{37} - 4u^{36} + \cdots - 2323u + 371$
c_2, c_8	$u^{37} + u^{36} + \cdots - 73337u + 9059$
c_3	$u^{37} - 3u^{36} + \cdots - 924u + 436$
c_4, c_{10}	$u^{37} + u^{36} + \cdots + 57272u + 22021$
c_5	$u^{37} - 2u^{36} + \cdots + 26864u + 132947$
c_6	$u^{37} + 4u^{36} + \cdots + 69u + 71$
c_7	$u^{37} + 5u^{36} + \cdots - 90135u + 22247$
c_9, c_{12}	$u^{37} - 3u^{36} + \cdots + 27u - 27$
c_{11}	$u^{37} - 2u^{36} + \cdots + 8266u + 347$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{37} + 12y^{36} + \cdots - 1418941y - 137641$
c_2, c_8	$y^{37} + 65y^{36} + \cdots - 1244302617y - 82065481$
c_3	$y^{37} + 15y^{36} + \cdots - 3507096y - 190096$
c_4, c_{10}	$y^{37} - 63y^{36} + \cdots - 4284792146y - 484924441$
c_5	$y^{37} + 84y^{36} + \cdots - 186496418056y - 17674904809$
c_6	$y^{37} - 12y^{36} + \cdots + 153577y - 5041$
c_7	$y^{37} - 79y^{36} + \cdots - 621600391y - 494929009$
c_9, c_{12}	$y^{37} + 35y^{36} + \cdots - 6075y - 729$
c_{11}	$y^{37} - 16y^{36} + \cdots + 76266810y - 120409$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.167576+1.059820I$ $a=-3.68479+0.47830I$ $b=\ \ 4.00168-0.78199I$	$-6.33270+0.58456I$	$4.48833+4.92922I$
$u=-0.167576-1.059820I$ $a=-3.68479-0.47830I$ $b=\ \ 4.00168+0.78199I$	$-6.33270-0.58456I$	$4.48833-4.92922I$
$u=-0.459153+1.191530I$ $a=\ \ 0.82442-1.37289I$ $b=-1.58984+0.88747I$	$4.34687+6.37531I$	$4.85551-8.12342I$
$u=-0.459153-1.191530I$ $a=\ \ 0.82442+1.37289I$ $b=-1.58984-0.88747I$	$4.34687-6.37531I$	$4.85551+8.12342I$
$u=-0.665909+0.256393I$ $a=\ \ 0.205806-1.100060I$ $b=-0.923196-0.122607I$	$1.54386-2.11310I$	$0.69649+4.84319I$
$u=-0.665909-0.256393I$ $a=\ \ 0.205806+1.100060I$ $b=-0.923196+0.122607I$	$1.54386+2.11310I$	$0.69649-4.84319I$
$u=\ \ 0.384563+1.236730I$ $a=\ \ 0.923969+0.381334I$ $b=-1.57334-0.01590I$	$1.13766-4.82922I$	$-4.75413+6.35770I$
$u=\ \ 0.384563-1.236730I$ $a=\ \ 0.923969-0.381334I$ $b=-1.57334+0.01590I$	$1.13766+4.82922I$	$-4.75413-6.35770I$
$u=-0.323724+1.264700I$ $a=\ \ 0.175356-0.423168I$ $b=\ \ 0.510942-0.182266I$	$6.26009+0.98488I$	$1.65796-0.75056I$
$u=-0.323724-1.264700I$ $a=\ \ 0.175356+0.423168I$ $b=\ \ 0.510942+0.182266I$	$6.26009-0.98488I$	$1.65796+0.75056I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.385093 + 0.545017I$ $a = -0.268434 - 1.007740I$ $b = 0.185188 + 0.521817I$	$-0.024291 - 1.165760I$	$-0.80928 + 6.18459I$
$u = 0.385093 - 0.545017I$ $a = -0.268434 + 1.007740I$ $b = 0.185188 - 0.521817I$	$-0.024291 + 1.165760I$	$-0.80928 - 6.18459I$
$u = -0.061867 + 1.394640I$ $a = -0.984047 + 0.296932I$ $b = 0.406963 - 0.361276I$	$13.74180 + 1.41481I$	$6.56734 - 5.56716I$
$u = -0.061867 - 1.394640I$ $a = -0.984047 - 0.296932I$ $b = 0.406963 + 0.361276I$	$13.74180 - 1.41481I$	$6.56734 + 5.56716I$
$u = 0.567279 + 0.193554I$ $a = -0.42064 + 2.13487I$ $b = 0.585496 + 0.181304I$	$0.41125 + 3.00174I$	$-3.07390 - 3.64949I$
$u = 0.567279 - 0.193554I$ $a = -0.42064 - 2.13487I$ $b = 0.585496 - 0.181304I$	$0.41125 - 3.00174I$	$-3.07390 + 3.64949I$
$u = 0.322097 + 1.363570I$ $a = -0.809804 + 0.171126I$ $b = 1.48039 + 0.37445I$	$3.14917 - 0.96903I$	0
$u = 0.322097 - 1.363570I$ $a = -0.809804 - 0.171126I$ $b = 1.48039 - 0.37445I$	$3.14917 + 0.96903I$	0
$u = 0.481521 + 0.299204I$ $a = -0.29262 + 2.32677I$ $b = -0.287518 - 0.472642I$	$-1.88357 + 1.37786I$	$-9.19174 + 1.54938I$
$u = 0.481521 - 0.299204I$ $a = -0.29262 - 2.32677I$ $b = -0.287518 + 0.472642I$	$-1.88357 - 1.37786I$	$-9.19174 - 1.54938I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.14297 + 1.43646I$ $a = -0.164059 + 0.136453I$ $b = -0.482858 + 0.065845I$	$4.94395 - 5.26244I$	$4.95493 + 7.25561I$
$u = 0.14297 - 1.43646I$ $a = -0.164059 - 0.136453I$ $b = -0.482858 - 0.065845I$	$4.94395 + 5.26244I$	$4.95493 - 7.25561I$
$u = -1.52010 + 0.15518I$ $a = 0.388678 + 0.524402I$ $b = -1.48572 + 0.39435I$	$13.2585 + 5.7889I$	0
$u = -1.52010 - 0.15518I$ $a = 0.388678 - 0.524402I$ $b = -1.48572 - 0.39435I$	$13.2585 - 5.7889I$	0
$u = -0.460772$ $a = 1.49046$ $b = 0.985143$	-1.64677	-6.24120
$u = 1.14789 + 1.07616I$ $a = 0.290213 + 0.775019I$ $b = -1.39903 - 0.23170I$	$-5.26058 - 4.15697I$	$20.8250 + 0.I$
$u = 1.14789 - 1.07616I$ $a = 0.290213 - 0.775019I$ $b = -1.39903 + 0.23170I$	$-5.26058 + 4.15697I$	$20.8250 + 0.I$
$u = -0.129945 + 0.296598I$ $a = 1.42426 - 2.10190I$ $b = 1.58369 + 0.22057I$	$9.68278 - 0.71257I$	$-0.76102 - 2.68873I$
$u = -0.129945 - 0.296598I$ $a = 1.42426 + 2.10190I$ $b = 1.58369 - 0.22057I$	$9.68278 + 0.71257I$	$-0.76102 + 2.68873I$
$u = -0.06893 + 1.69284I$ $a = -2.11977 - 0.00511I$ $b = 3.07286 - 0.11340I$	$17.2905 + 0.2066I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.06893 - 1.69284I$ $a = -2.11977 + 0.00511I$ $b = 3.07286 + 0.11340I$	$17.2905 - 0.2066I$	0
$u = -0.65528 + 1.58363I$ $a = 1.13446 - 1.07747I$ $b = -2.20101 + 0.73181I$	$18.6868 + 13.3663I$	0
$u = -0.65528 - 1.58363I$ $a = 1.13446 + 1.07747I$ $b = -2.20101 - 0.73181I$	$18.6868 - 13.3663I$	0
$u = 0.22500 + 1.73667I$ $a = -1.55015 + 0.10298I$ $b = 2.47070 + 0.29718I$	$7.62465 - 0.70239I$	0
$u = 0.22500 - 1.73667I$ $a = -1.55015 - 0.10298I$ $b = 2.47070 - 0.29718I$	$7.62465 + 0.70239I$	0
$u = -0.87353 + 1.60469I$ $a = 0.515257 - 0.731056I$ $b = -0.347949 - 0.452043I$	$17.5224 + 2.6853I$	0
$u = -0.87353 - 1.60469I$ $a = 0.515257 + 0.731056I$ $b = -0.347949 + 0.452043I$	$17.5224 - 2.6853I$	0

II.

$\boldsymbol{I_2^u = \langle -1.13\times 10^9 u^{24} + 8.09\times 10^9 u^{23} + \cdots + 3.92\times 10^9 b + 3.81\times 10^9,\ 6.49\times 10^9 u^{24} - 2.39\times 10^{10} u^{23} + \cdots + 3.92\times 10^9 a + 1.47\times 10^{10},\ u^{25} - 4u^{24} + \cdots - 9u + 1\rangle}$

(i) Arc colorings

$$a_9 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-1.65288u^{24} + 6.09339u^{23} + \cdots - 2.91819u - 3.73468\\0.288273u^{24} - 2.06219u^{23} + \cdots + 11.6354u - 0.971213\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-1.70636u^{24} + 5.59466u^{23} + \cdots + 11.7276u - 5.22403\\0.556721u^{24} - 2.37317u^{23} + \cdots + 5.27525u - 0.258587\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-2.56378u^{24} + 7.61504u^{23} + \cdots - 28.4470u + 2.55259\\0.486242u^{24} - 1.35369u^{23} + \cdots + 3.80240u - 0.384318\end{pmatrix}$$
$$a_6 = \begin{pmatrix}2.87677u^{24} - 11.8498u^{23} + \cdots + 78.7045u - 11.8129\\-0.240444u^{24} + 1.16517u^{23} + \cdots - 12.2022u + 1.62144\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-3.05002u^{24} + 8.96873u^{23} + \cdots - 32.2494u + 2.93691\\0.486242u^{24} - 1.35369u^{23} + \cdots + 3.80240u - 0.384318\end{pmatrix}$$
$$a_8 = \begin{pmatrix}2.78473u^{24} - 11.4190u^{23} + \cdots + 69.1681u - 10.1842\\-0.363384u^{24} + 1.54406u^{23} + \cdots - 10.9514u + 1.76945\end{pmatrix}$$
$$a_7 = \begin{pmatrix}2.73126u^{24} - 10.9178u^{23} + \cdots + 74.8139u - 11.6736\\-0.0949357u^{24} + 0.233088u^{23} + \cdots - 8.31152u + 1.48207\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}3.25777u^{24} - 11.9300u^{23} + \cdots + 42.3975u - 3.58230\\-0.233376u^{24} + 1.03096u^{23} + \cdots - 10.7272u + 1.36206\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{16865762293}{3924483813}u^{24} - \frac{26283566834}{1308161271}u^{23} + \cdots + \frac{557421548465}{3924483813}u - \frac{84415101034}{3924483813}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{25} - 7u^{24} + \cdots + 3u - 1$
c_2	$u^{25} + 6u^{23} + \cdots + u + 1$
c_3	$u^{25} - 6u^{24} + \cdots + 3u - 1$
c_4	$u^{25} - 8u^{23} + \cdots + 8u + 1$
c_5	$u^{25} + 3u^{24} + \cdots - 1944u + 631$
c_6	$u^{25} - u^{24} + \cdots - 15u + 1$
c_7	$u^{25} + 8u^{24} + \cdots - 2345u - 797$
c_8	$u^{25} + 6u^{23} + \cdots + u - 1$
c_9	$u^{25} - 4u^{24} + \cdots - 9u + 1$
c_{10}	$u^{25} - 8u^{23} + \cdots + 8u - 1$
c_{11}	$u^{25} + u^{24} + \cdots + 2u - 1$
c_{12}	$u^{25} + 4u^{24} + \cdots - 9u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{25} - 5y^{24} + \cdots + 13y - 1$
c_2, c_8	$y^{25} + 12y^{24} + \cdots - 31y - 1$
c_3	$y^{25} - 10y^{24} + \cdots + 15y - 1$
c_4, c_{10}	$y^{25} - 16y^{24} + \cdots + 24y - 1$
c_5	$y^{25} + 7y^{24} + \cdots + 2558782y - 398161$
c_6	$y^{25} - 5y^{24} + \cdots - 125y - 1$
c_7	$y^{25} - 16y^{24} + \cdots - 2982649y - 635209$
c_9, c_{12}	$y^{25} + 18y^{24} + \cdots + 7y - 1$
c_{11}	$y^{25} + 11y^{24} + \cdots - 12y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.211608 + 0.978671I$ $a = 4.02880 - 1.31629I$ $b = -4.19783 + 0.93997I$	$-6.57774 + 0.83601I$	$-12.6564 - 11.7355I$
$u = -0.211608 - 0.978671I$ $a = 4.02880 + 1.31629I$ $b = -4.19783 - 0.93997I$	$-6.57774 - 0.83601I$	$-12.6564 + 11.7355I$
$u = -1.04938$ $a = -0.0313361$ $b = 1.39743$	-0.108576	0.152620
$u = 0.798599 + 0.744182I$ $a = -0.551742 - 1.128860I$ $b = 0.836085 - 0.082926I$	$2.01196 + 0.69255I$	$1.79790 - 0.00493I$
$u = 0.798599 - 0.744182I$ $a = -0.551742 + 1.128860I$ $b = 0.836085 + 0.082926I$	$2.01196 - 0.69255I$	$1.79790 + 0.00493I$
$u = 0.501731 + 0.720411I$ $a = -0.249121 + 1.158170I$ $b = -0.568048 - 0.400869I$	$-1.84833 - 2.11157I$	$-3.19865 + 3.94763I$
$u = 0.501731 - 0.720411I$ $a = -0.249121 - 1.158170I$ $b = -0.568048 + 0.400869I$	$-1.84833 + 2.11157I$	$-3.19865 - 3.94763I$
$u = 0.209489 + 1.126730I$ $a = 0.157093 - 0.519084I$ $b = -1.141540 + 0.622781I$	$3.06603 - 4.36373I$	$1.36746 + 3.83070I$
$u = 0.209489 - 1.126730I$ $a = 0.157093 + 0.519084I$ $b = -1.141540 - 0.622781I$	$3.06603 + 4.36373I$	$1.36746 - 3.83070I$
$u = 0.103688 + 0.826073I$ $a = 1.21034 + 1.47977I$ $b = 0.314331 - 0.723879I$	$1.76724 + 3.08166I$	$2.11503 - 3.41199I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.103688 - 0.826073I$ $a = 1.21034 - 1.47977I$ $b = 0.314331 + 0.723879I$	$1.76724 - 3.08166I$	$2.11503 + 3.41199I$
$u = 0.535937 + 1.071200I$ $a = -0.690754 - 1.148390I$ $b = 1.67707 + 0.86201I$	$3.25606 - 5.74154I$	$-0.57302 + 3.73990I$
$u = 0.535937 - 1.071200I$ $a = -0.690754 + 1.148390I$ $b = 1.67707 - 0.86201I$	$3.25606 + 5.74154I$	$-0.57302 - 3.73990I$
$u = -0.318864 + 0.683122I$ $a = -0.054095 + 0.536492I$ $b = -1.59233 - 0.00324I$	$9.97950 + 1.46375I$	$3.71841 - 5.95020I$
$u = -0.318864 - 0.683122I$ $a = -0.054095 - 0.536492I$ $b = -1.59233 + 0.00324I$	$9.97950 - 1.46375I$	$3.71841 + 5.95020I$
$u = -0.510417 + 1.288240I$ $a = -0.87810 + 1.16015I$ $b = 1.43360 - 0.55061I$	$4.00523 + 5.32915I$	$1.41990 - 1.29007I$
$u = -0.510417 - 1.288240I$ $a = -0.87810 - 1.16015I$ $b = 1.43360 + 0.55061I$	$4.00523 - 5.32915I$	$1.41990 + 1.29007I$
$u = -0.16459 + 1.42006I$ $a = 1.178580 - 0.185673I$ $b = -0.815305 - 0.153731I$	$13.10510 + 0.67738I$	$-0.354087 + 0.858492I$
$u = -0.16459 - 1.42006I$ $a = 1.178580 + 0.185673I$ $b = -0.815305 + 0.153731I$	$13.10510 - 0.67738I$	$-0.354087 - 0.858492I$
$u = 0.20160 + 1.49559I$ $a = 0.529194 - 0.551861I$ $b = -0.710252 + 0.710457I$	$4.43285 - 4.32284I$	$0.666667 + 0.650947I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.20160 - 1.49559I$ $a = 0.529194 + 0.551861I$ $b = -0.710252 - 0.710457I$	$4.43285 + 4.32284I$	$0.666667 - 0.650947I$
$u = 1.15413 + 1.05672I$ $a = 0.254363 + 0.770568I$ $b = -1.372110 - 0.235434I$	$-5.39972 - 4.16553I$	$-36.8997 + 7.0211I$
$u = 1.15413 - 1.05672I$ $a = 0.254363 - 0.770568I$ $b = -1.372110 + 0.235434I$	$-5.39972 + 4.16553I$	$-36.8997 - 7.0211I$
$u = 0.224993 + 0.114423I$ $a = -4.41889 - 1.18595I$ $b = 0.437604 + 0.274587I$	$-1.42493 - 1.96110I$	$-1.97977 + 5.53360I$
$u = 0.224993 - 0.114423I$ $a = -4.41889 + 1.18595I$ $b = 0.437604 - 0.274587I$	$-1.42493 + 1.96110I$	$-1.97977 - 5.53360I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{25}-7u^{24}+\cdots+3u-1)(u^{37}-4u^{36}+\cdots-2323u+371)$
c_2	$(u^{25}+6u^{23}+\cdots+u+1)(u^{37}+u^{36}+\cdots-73337u+9059)$
c_3	$(u^{25}-6u^{24}+\cdots+3u-1)(u^{37}-3u^{36}+\cdots-924u+436)$
c_4	$(u^{25}-8u^{23}+\cdots+8u+1)(u^{37}+u^{36}+\cdots+57272u+22021)$
c_5	$(u^{25}+3u^{24}+\cdots-1944u+631)$ $\cdot(u^{37}-2u^{36}+\cdots+26864u+132947)$
c_6	$(u^{25}-u^{24}+\cdots-15u+1)(u^{37}+4u^{36}+\cdots+69u+71)$
c_7	$(u^{25}+8u^{24}+\cdots-2345u-797)(u^{37}+5u^{36}+\cdots-90135u+22247)$
c_8	$(u^{25}+6u^{23}+\cdots+u-1)(u^{37}+u^{36}+\cdots-73337u+9059)$
c_9	$(u^{25}-4u^{24}+\cdots-9u+1)(u^{37}-3u^{36}+\cdots+27u-27)$
c_{10}	$(u^{25}-8u^{23}+\cdots+8u-1)(u^{37}+u^{36}+\cdots+57272u+22021)$
c_{11}	$(u^{25}+u^{24}+\cdots+2u-1)(u^{37}-2u^{36}+\cdots+8266u+347)$
c_{12}	$(u^{25}+4u^{24}+\cdots-9u-1)(u^{37}-3u^{36}+\cdots+27u-27)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{25} - 5y^{24} + \cdots + 13y - 1)(y^{37} + 12y^{36} + \cdots - 1418941y - 137641)$
c_2, c_8	$(y^{25} + 12y^{24} + \cdots - 31y - 1)$ $\cdot (y^{37} + 65y^{36} + \cdots - 1244302617y - 82065481)$
c_3	$(y^{25} - 10y^{24} + \cdots + 15y - 1)$ $\cdot (y^{37} + 15y^{36} + \cdots - 3507096y - 190096)$
c_4, c_{10}	$(y^{25} - 16y^{24} + \cdots + 24y - 1)$ $\cdot (y^{37} - 63y^{36} + \cdots - 4284792146y - 484924441)$
c_5	$(y^{25} + 7y^{24} + \cdots + 2558782y - 398161)$ $\cdot (y^{37} + 84y^{36} + \cdots - 186496418056y - 17674904809)$
c_6	$(y^{25} - 5y^{24} + \cdots - 125y - 1)(y^{37} - 12y^{36} + \cdots + 153577y - 5041)$
c_7	$(y^{25} - 16y^{24} + \cdots - 2982649y - 635209)$ $\cdot (y^{37} - 79y^{36} + \cdots - 621600391y - 494929009)$
c_9, c_{12}	$(y^{25} + 18y^{24} + \cdots + 7y - 1)(y^{37} + 35y^{36} + \cdots - 6075y - 729)$
c_{11}	$(y^{25} + 11y^{24} + \cdots - 12y - 1)$ $\cdot (y^{37} - 16y^{36} + \cdots + 76266810y - 120409)$