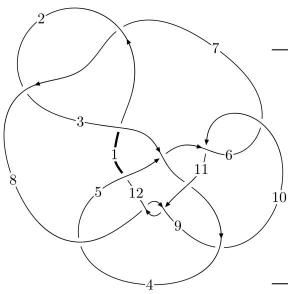
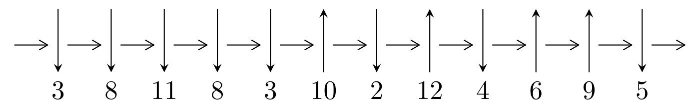
$12n_{0623}$ ($K12n_{0623}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -2.63058 \times 10^{46} u^{50} - 6.85822 \times 10^{46} u^{49} + \cdots + 1.47546 \times 10^{47} b - 4.38223 \times 10^{45},$$
$$1.43564 \times 10^{47} u^{50} + 2.66794 \times 10^{47} u^{49} + \cdots + 2.95092 \times 10^{46} a - 8.98457 \times 10^{47},\ u^{51} + 2u^{50} + \cdots - 20u -$$
$$I_2^u = \langle 734795u^{24} - 937935u^{23} + \cdots + 1479559b - 7004637,$$
$$7267713u^{24} - 29159355u^{23} + \cdots + 10356913a + 53569336,\ u^{25} - 3u^{24} + \cdots + 13u - 7\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 76 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. $\boldsymbol{I_1^u = \langle -2.63 \times 10^{46}u^{50} - 6.86 \times 10^{46}u^{49} + \cdots + 1.48 \times 10^{47}b - 4.38 \times 10^{45},\ 1.44 \times 10^{47}u^{50} + 2.67 \times 10^{47}u^{49} + \cdots + 2.95 \times 10^{46}a - 8.98 \times 10^{47},\ u^{51} + 2u^{50} + \cdots - 20u - 1\rangle}$

(i) Arc colorings

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

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

$$a_4 = \begin{pmatrix} -4.86506u^{50} - 9.04104u^{49} + \cdots + 401.075u + 30.4466 \\ 0.178289u^{50} + 0.464818u^{49} + \cdots - 1.50621u + 0.0297007 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -4.68677u^{50} - 8.57622u^{49} + \cdots + 399.569u + 30.4763 \\ 0.178289u^{50} + 0.464818u^{49} + \cdots - 1.50621u + 0.0297007 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -4.04798u^{50} - 7.68387u^{49} + \cdots + 394.709u + 29.9218 \\ 0.435517u^{50} + 0.759418u^{49} + \cdots + 9.58290u + 0.831538 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.492075u^{50} - 1.07500u^{49} + \cdots + 8.84678u + 0.791857 \\ 0.448896u^{50} + 0.866909u^{49} + \cdots - 28.7594u - 1.09977 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -5.17498u^{50} - 9.34209u^{49} + \cdots + 407.539u + 31.1016 \\ 0.116517u^{50} + 0.462241u^{49} + \cdots - 13.1991u - 0.806114 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -1.37890u^{50} - 2.73615u^{49} + \cdots + 223.956u + 19.6475 \\ 0.429385u^{50} + 0.695780u^{49} + \cdots + 26.4629u + 1.76995 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -2.47371u^{50} - 3.53471u^{49} + \cdots + 104.745u + 3.16254 \\ 0.523695u^{50} + 1.61796u^{49} + \cdots - 60.5796u - 4.48349 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 2.06937u^{50} + 4.75975u^{49} + \cdots - 212.579u - 11.9991 \\ 0.00104699u^{50} + 0.319182u^{49} + \cdots + 22.4132u + 2.24661 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.340250u^{50} + 1.20422u^{49} + \cdots - 76.8449u - 18.3790$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{51} + 79u^{50} + \cdots + 3170864u + 157609$
c_2, c_7	$u^{51} - u^{50} + \cdots + 5960u - 397$
c_3	$u^{51} + 3u^{50} + \cdots + 1255u + 1525$
c_4	$u^{51} + 5u^{50} + \cdots + 121755522u + 25773061$
c_5	$u^{51} + 8u^{50} + \cdots + 281253u - 27881$
c_6, c_{10}	$u^{51} - 2u^{50} + \cdots + 6u + 1$
c_8, c_{11}	$u^{51} + 2u^{50} + \cdots - 20u - 1$
c_9	$u^{51} - u^{50} + \cdots + 1746u + 2359$
c_{12}	$u^{51} - 48u^{49} + \cdots - 2629425u - 635671$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{51} - 199y^{50} + \cdots - 14350346271952y - 24840596881$
c_2, c_7	$y^{51} - 79y^{50} + \cdots + 3170864y - 157609$
c_3	$y^{51} - 25y^{50} + \cdots - 12525125y - 2325625$
c_4	$y^{51} - 67y^{50} + \cdots + 3374348243821274y - 664250673309721$
c_5	$y^{51} - 100y^{50} + \cdots + 13844981409y - 777350161$
c_6, c_{10}	$y^{51} + 48y^{50} + \cdots + 156y - 1$
c_8, c_{11}	$y^{51} + 40y^{50} + \cdots + 128y - 1$
c_9	$y^{51} - 23y^{50} + \cdots - 93576124y - 5564881$
c_{12}	$y^{51} - 96y^{50} + \cdots - 3893761828431y - 404077620241$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.994138 + 0.085954I$ $a = -1.353360 - 0.114217I$ $b = 1.269410 + 0.406751I$	$-5.19174 - 2.40432I$	$-8.36352 + 1.90027I$
$u = -0.994138 - 0.085954I$ $a = -1.353360 + 0.114217I$ $b = 1.269410 - 0.406751I$	$-5.19174 + 2.40432I$	$-8.36352 - 1.90027I$
$u = 0.786614 + 0.574148I$ $a = 0.427916 + 0.361953I$ $b = 0.026370 - 0.354661I$	$1.35251 + 1.31026I$	$5.81869 - 2.67401I$
$u = 0.786614 - 0.574148I$ $a = 0.427916 - 0.361953I$ $b = 0.026370 + 0.354661I$	$1.35251 - 1.31026I$	$5.81869 + 2.67401I$
$u = -1.106830 + 0.122939I$ $a = 1.20913 + 0.99476I$ $b = -1.38251 - 0.85821I$	$-16.0490 - 8.5925I$	$-7.67000 + 4.03651I$
$u = -1.106830 - 0.122939I$ $a = 1.20913 - 0.99476I$ $b = -1.38251 + 0.85821I$	$-16.0490 + 8.5925I$	$-7.67000 - 4.03651I$
$u = 0.852088 + 0.208570I$ $a = 0.207993 + 0.892841I$ $b = 0.149185 - 0.737393I$	$1.55720 + 1.17905I$	$3.83068 - 5.32777I$
$u = 0.852088 - 0.208570I$ $a = 0.207993 - 0.892841I$ $b = 0.149185 + 0.737393I$	$1.55720 - 1.17905I$	$3.83068 + 5.32777I$
$u = 0.026626 + 1.187680I$ $a = -0.614290 - 0.648940I$ $b = -1.093360 + 0.724987I$	$-3.93895 - 0.13627I$	$-8.12420 + 0.I$
$u = 0.026626 - 1.187680I$ $a = -0.614290 + 0.648940I$ $b = -1.093360 - 0.724987I$	$-3.93895 + 0.13627I$	$-8.12420 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.310319 + 1.178590I$ $a = 0.422592 + 0.832622I$ $b = 0.701422 - 0.894046I$	$-1.33059 + 2.80047I$	0
$u = 0.310319 - 1.178590I$ $a = 0.422592 - 0.832622I$ $b = 0.701422 + 0.894046I$	$-1.33059 - 2.80047I$	0
$u = 0.158146 + 1.210580I$ $a = 2.63622 - 0.93189I$ $b = 0.669895 - 0.455137I$	$-17.1653 + 1.7421I$	0
$u = 0.158146 - 1.210580I$ $a = 2.63622 + 0.93189I$ $b = 0.669895 + 0.455137I$	$-17.1653 - 1.7421I$	0
$u = 1.22316$ $a = 1.10222$ $b = -1.25545$	-10.6865	-8.45790
$u = -0.288984 + 1.202430I$ $a = 0.47810 - 1.51286I$ $b = 1.034950 + 0.604820I$	$-4.73867 - 6.03590I$	0
$u = -0.288984 - 1.202430I$ $a = 0.47810 + 1.51286I$ $b = 1.034950 - 0.604820I$	$-4.73867 + 6.03590I$	0
$u = -0.058157 + 0.755707I$ $a = -0.636801 - 0.138149I$ $b = 0.020839 + 0.840879I$	$-2.04460 - 0.19383I$	$-7.78460 + 0.50141I$
$u = -0.058157 - 0.755707I$ $a = -0.636801 + 0.138149I$ $b = 0.020839 - 0.840879I$	$-2.04460 + 0.19383I$	$-7.78460 - 0.50141I$
$u = -0.084630 + 1.245450I$ $a = -0.278589 + 0.972468I$ $b = -1.54630 - 1.46810I$	$-7.13833 - 3.92211I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.084630 - 1.245450I$ $a = -0.278589 - 0.972468I$ $b = -1.54630 + 1.46810I$	$-7.13833 + 3.92211I$	0
$u = 0.016591 + 1.259310I$ $a = -0.702940 + 1.065780I$ $b = -0.894998 + 0.074500I$	$-7.74070 + 2.61044I$	0
$u = 0.016591 - 1.259310I$ $a = -0.702940 - 1.065780I$ $b = -0.894998 - 0.074500I$	$-7.74070 - 2.61044I$	0
$u = -0.220765 + 1.247150I$ $a = -0.083136 - 0.648485I$ $b = 1.56558 + 0.49642I$	$-5.51008 - 0.25342I$	0
$u = -0.220765 - 1.247150I$ $a = -0.083136 + 0.648485I$ $b = 1.56558 - 0.49642I$	$-5.51008 + 0.25342I$	0
$u = -0.159806 + 1.260190I$ $a = 0.772250 + 0.695570I$ $b = 0.721665 - 0.654312I$	$-11.89480 - 2.24028I$	0
$u = -0.159806 - 1.260190I$ $a = 0.772250 - 0.695570I$ $b = 0.721665 + 0.654312I$	$-11.89480 + 2.24028I$	0
$u = 0.161089 + 1.307720I$ $a = -0.387695 - 0.725680I$ $b = 1.45529 + 2.33010I$	$-18.3648 + 2.7821I$	0
$u = 0.161089 - 1.307720I$ $a = -0.387695 + 0.725680I$ $b = 1.45529 - 2.33010I$	$-18.3648 - 2.7821I$	0
$u = 0.689622 + 1.168360I$ $a = 0.106520 + 0.152425I$ $b = -0.293292 - 0.510638I$	$-0.59495 + 4.55029I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.689622 - 1.168360I$ $a = 0.106520 - 0.152425I$ $b = -0.293292 + 0.510638I$	$-0.59495 - 4.55029I$	0
$u = -0.622814 + 0.099336I$ $a = 1.58845 - 0.82975I$ $b = -0.913841 + 0.194293I$	$-1.42485 + 2.61753I$	$-2.41324 - 1.50958I$
$u = -0.622814 - 0.099336I$ $a = 1.58845 + 0.82975I$ $b = -0.913841 - 0.194293I$	$-1.42485 - 2.61753I$	$-2.41324 + 1.50958I$
$u = -0.503411 + 1.302910I$ $a = 0.222439 + 1.271540I$ $b = -1.185630 - 0.129138I$	$-9.00099 - 2.99057I$	0
$u = -0.503411 - 1.302910I$ $a = 0.222439 - 1.271540I$ $b = -1.185630 + 0.129138I$	$-9.00099 + 2.99057I$	0
$u = 0.40947 + 1.36366I$ $a = -0.526747 - 0.671786I$ $b = -0.752311 + 0.792221I$	$-3.31584 + 5.81138I$	0
$u = 0.40947 - 1.36366I$ $a = -0.526747 + 0.671786I$ $b = -0.752311 - 0.792221I$	$-3.31584 - 5.81138I$	0
$u = -0.42839 + 1.36330I$ $a = 0.044190 + 0.982449I$ $b = -1.81626 - 0.80792I$	$-9.79831 - 7.44096I$	0
$u = -0.42839 - 1.36330I$ $a = 0.044190 - 0.982449I$ $b = -1.81626 + 0.80792I$	$-9.79831 + 7.44096I$	0
$u = -0.49015 + 1.41710I$ $a = 0.274461 - 1.344710I$ $b = 1.60591 + 1.08179I$	$18.5631 - 14.2339I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.49015 - 1.41710I$ $a = 0.274461 + 1.344710I$ $b = 1.60591 - 1.08179I$	$18.5631 + 14.2339I$	0
$u = -0.64736 + 1.35681I$ $a = -0.744754 - 0.575553I$ $b = 1.33716 - 0.48247I$	$19.7044 + 2.3380I$	0
$u = -0.64736 - 1.35681I$ $a = -0.744754 + 0.575553I$ $b = 1.33716 + 0.48247I$	$19.7044 - 2.3380I$	0
$u = 0.473371 + 0.113783I$ $a = -1.30948 + 3.62099I$ $b = -0.86213 - 1.28518I$	$-13.90700 + 0.51978I$	$-6.17475 - 0.20171I$
$u = 0.473371 - 0.113783I$ $a = -1.30948 - 3.62099I$ $b = -0.86213 + 1.28518I$	$-13.90700 - 0.51978I$	$-6.17475 + 0.20171I$
$u = -0.466662$ $a = -1.70449$ $b = -0.595548$	-8.02552	-22.3740
$u = 0.56332 + 1.45126I$ $a = -0.174961 + 0.929296I$ $b = 1.39706 - 0.38413I$	$-15.3202 + 6.3714I$	0
$u = 0.56332 - 1.45126I$ $a = -0.174961 - 0.929296I$ $b = 1.39706 + 0.38413I$	$-15.3202 - 6.3714I$	0
$u = -0.166908 + 0.082981I$ $a = -5.15701 - 2.31484I$ $b = 0.960493 - 0.750766I$	$-3.58169 + 2.87292I$	$-8.22764 - 2.63355I$
$u = -0.166908 - 0.082981I$ $a = -5.15701 + 2.31484I$ $b = 0.960493 + 0.750766I$	$-3.58169 - 2.87292I$	$-8.22764 + 2.63355I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.106308$ $a = 3.76128$ $b = 0.501782$	-0.859424	-11.7400

II. $I_2^u = \langle 7.35\times10^5u^{24} - 9.38\times10^5u^{23} + \cdots + 1.48\times10^6b - 7.00\times10^6,\ 7.27\times10^6u^{24} - 2.92\times10^7u^{23} + \cdots + 1.04\times10^7a + 5.36\times10^7,\ u^{25} - 3u^{24} + \cdots + 13u - 7\rangle$

(i) Arc colorings

$$a_9 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-0.701726u^{24} + 2.81545u^{23} + \cdots + 11.8091u - 5.17233\\-0.496631u^{24} + 0.633929u^{23} + \cdots - 9.36066u + 4.73427\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_3 = \begin{pmatrix}-1.19836u^{24} + 3.44938u^{23} + \cdots + 2.44847u - 0.438053\\-0.496631u^{24} + 0.633929u^{23} + \cdots - 9.36066u + 4.73427\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-u\\u^3+u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}-1.87701u^{24} + 5.33929u^{23} + \cdots + 1.97688u + 3.82771\\-1.10959u^{24} + 2.60918u^{23} + \cdots - 4.32774u + 2.74843\end{pmatrix}$$
$$a_6 = \begin{pmatrix}1.10695u^{24} - 3.28329u^{23} + \cdots - 3.85869u + 2.45136\\0.349387u^{24} - 0.152774u^{23} + \cdots + 12.4684u - 7.59653\end{pmatrix}$$
$$a_2 = \begin{pmatrix}-0.677384u^{24} + 2.96821u^{23} + \cdots + 16.9113u - 10.2873\\0.373689u^{24} - 1.86668u^{23} + \cdots - 13.4076u + 7.01127\end{pmatrix}$$
$$a_1 = \begin{pmatrix}3.51385u^{24} - 9.56743u^{23} + \cdots + 5.52009u - 11.3721\\0.870320u^{24} - 1.50061u^{23} + \cdots + 8.95310u - 3.72301\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-1.24978u^{24} + 4.85892u^{23} + \cdots + 15.5740u + 1.08065\\-0.427846u^{24} + 0.336245u^{23} + \cdots - 11.0557u + 5.37195\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-1.53579u^{24} + 2.59613u^{23} + \cdots - 23.5205u + 13.1392\\0.791862u^{24} - 2.31714u^{23} + \cdots - 1.63424u - 0.947584\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{1222669}{1479559}u^{24} - \frac{2760822}{1479559}u^{23} + \cdots - \frac{13385950}{1479559}u + \frac{10657151}{1479559}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{25} - 28u^{24} + \cdots + 97u - 9$
c_2	$u^{25} - 14u^{23} + \cdots + 5u + 3$
c_3	$u^{25} - 2u^{24} + \cdots + 2u - 1$
c_4	$u^{25} - 6u^{23} + \cdots - 3u + 1$
c_5	$u^{25} + 21u^{24} + \cdots + 2014u + 271$
c_6	$u^{25} - u^{24} + \cdots + u - 1$
c_7	$u^{25} - 14u^{23} + \cdots + 5u - 3$
c_8	$u^{25} + 3u^{24} + \cdots + 13u + 7$
c_9	$u^{25} + 2u^{23} + \cdots + 11u - 3$
c_{10}	$u^{25} + u^{24} + \cdots + u + 1$
c_{11}	$u^{25} - 3u^{24} + \cdots + 13u - 7$
c_{12}	$u^{25} + 3u^{24} + \cdots - 6u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{25} - 48y^{24} + \cdots - 3731y - 81$
c_2, c_7	$y^{25} - 28y^{24} + \cdots + 97y - 9$
c_3	$y^{25} - 2y^{24} + \cdots + 20y - 1$
c_4	$y^{25} - 12y^{24} + \cdots - 9y - 1$
c_5	$y^{25} - 33y^{24} + \cdots + 697422y - 73441$
c_6, c_{10}	$y^{25} + 15y^{24} + \cdots - 15y - 1$
c_8, c_{11}	$y^{25} + 19y^{24} + \cdots + 29y - 49$
c_9	$y^{25} + 4y^{24} + \cdots + 73y - 9$
c_{12}	$y^{25} - 17y^{24} + \cdots - 10y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.165879 + 1.036770I$ $a = 1.99622 - 0.01072I$ $b = 0.178538 - 1.088440I$	$-16.3073 - 0.6846I$	$-10.58791 - 0.36694I$
$u = -0.165879 - 1.036770I$ $a = 1.99622 + 0.01072I$ $b = 0.178538 + 1.088440I$	$-16.3073 + 0.6846I$	$-10.58791 + 0.36694I$
$u = 0.878653 + 0.614276I$ $a = -0.388165 - 0.018797I$ $b = 0.519314 - 0.020674I$	$0.87332 + 1.24381I$	$-11.80207 - 0.23731I$
$u = 0.878653 - 0.614276I$ $a = -0.388165 + 0.018797I$ $b = 0.519314 + 0.020674I$	$0.87332 - 1.24381I$	$-11.80207 + 0.23731I$
$u = -0.241992 + 1.085870I$ $a = -0.080016 - 1.368120I$ $b = 0.99835 + 1.05321I$	$-5.21178 - 4.26834I$	$-9.53069 + 3.29154I$
$u = -0.241992 - 1.085870I$ $a = -0.080016 + 1.368120I$ $b = 0.99835 - 1.05321I$	$-5.21178 + 4.26834I$	$-9.53069 - 3.29154I$
$u = -0.525469 + 0.701017I$ $a = 1.028560 + 0.820742I$ $b = -0.762718 + 0.513757I$	$-4.05799 + 1.29515I$	$-9.79398 + 0.20407I$
$u = -0.525469 - 0.701017I$ $a = 1.028560 - 0.820742I$ $b = -0.762718 - 0.513757I$	$-4.05799 - 1.29515I$	$-9.79398 - 0.20407I$
$u = 0.777677 + 0.135052I$ $a = 0.311592 + 1.346060I$ $b = 0.258764 - 1.085200I$	$0.620768 + 1.112620I$	$-6.49974 - 2.44499I$
$u = 0.777677 - 0.135052I$ $a = 0.311592 - 1.346060I$ $b = 0.258764 + 1.085200I$	$0.620768 - 1.112620I$	$-6.49974 + 2.44499I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.310226 + 1.219750I$ $a = 0.473117 + 0.758104I$ $b = 0.347343 - 1.317550I$	$-2.69003 + 2.74082I$	$-10.35889 - 2.75940I$
$u = 0.310226 - 1.219750I$ $a = 0.473117 - 0.758104I$ $b = 0.347343 + 1.317550I$	$-2.69003 - 2.74082I$	$-10.35889 + 2.75940I$
$u = -0.080358 + 1.265810I$ $a = -0.337318 + 0.390448I$ $b = -1.46431 + 0.22680I$	$-6.46312 + 1.42279I$	$-11.59416 - 0.83507I$
$u = -0.080358 - 1.265810I$ $a = -0.337318 - 0.390448I$ $b = -1.46431 - 0.22680I$	$-6.46312 - 1.42279I$	$-11.59416 + 0.83507I$
$u = -0.688617 + 0.067271I$ $a = -1.045060 + 0.756974I$ $b = 1.051830 - 0.523343I$	$-2.21685 + 3.76261I$	$-5.20350 - 5.51009I$
$u = -0.688617 - 0.067271I$ $a = -1.045060 - 0.756974I$ $b = 1.051830 + 0.523343I$	$-2.21685 - 3.76261I$	$-5.20350 + 5.51009I$
$u = -0.357165 + 1.267210I$ $a = -0.555297 + 1.045050I$ $b = -1.27741 - 0.62995I$	$-5.96754 - 7.70508I$	$-10.28604 + 7.69329I$
$u = -0.357165 - 1.267210I$ $a = -0.555297 - 1.045050I$ $b = -1.27741 + 0.62995I$	$-5.96754 + 7.70508I$	$-10.28604 - 7.69329I$
$u = 0.159087 + 1.319010I$ $a = 0.607715 - 0.734484I$ $b = 0.665222 + 0.443905I$	$-12.13970 + 2.72655I$	$-15.2074 - 7.6255I$
$u = 0.159087 - 1.319010I$ $a = 0.607715 + 0.734484I$ $b = 0.665222 - 0.443905I$	$-12.13970 - 2.72655I$	$-15.2074 + 7.6255I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.629591$ $a = -1.11654$ $b = -0.430836$	-7.69986	2.83470
$u = 0.367086 + 1.360610I$ $a = -0.793602 - 0.650211I$ $b = -0.772849 + 0.983417I$	$-4.11796 + 5.31027I$	$-12.29936 - 3.61405I$
$u = 0.367086 - 1.360610I$ $a = -0.793602 + 0.650211I$ $b = -0.772849 - 0.983417I$	$-4.11796 - 5.31027I$	$-12.29936 + 3.61405I$
$u = 0.75195 + 1.19779I$ $a = 0.054806 - 0.462184I$ $b = -0.526659 + 0.040712I$	$-0.97942 + 4.93110I$	$-10.7537 - 10.6108I$
$u = 0.75195 - 1.19779I$ $a = 0.054806 + 0.462184I$ $b = -0.526659 - 0.040712I$	$-0.97942 - 4.93110I$	$-10.7537 + 10.6108I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{25} - 28u^{24} + \cdots + 97u - 9)$ $\cdot (u^{51} + 79u^{50} + \cdots + 3170864u + 157609)$
c_2	$(u^{25} - 14u^{23} + \cdots + 5u + 3)(u^{51} - u^{50} + \cdots + 5960u - 397)$
c_3	$(u^{25} - 2u^{24} + \cdots + 2u - 1)(u^{51} + 3u^{50} + \cdots + 1255u + 1525)$
c_4	$(u^{25} - 6u^{23} + \cdots - 3u + 1)$ $\cdot (u^{51} + 5u^{50} + \cdots + 121755522u + 25773061)$
c_5	$(u^{25} + 21u^{24} + \cdots + 2014u + 271)$ $\cdot (u^{51} + 8u^{50} + \cdots + 281253u - 27881)$
c_6	$(u^{25} - u^{24} + \cdots + u - 1)(u^{51} - 2u^{50} + \cdots + 6u + 1)$
c_7	$(u^{25} - 14u^{23} + \cdots + 5u - 3)(u^{51} - u^{50} + \cdots + 5960u - 397)$
c_8	$(u^{25} + 3u^{24} + \cdots + 13u + 7)(u^{51} + 2u^{50} + \cdots - 20u - 1)$
c_9	$(u^{25} + 2u^{23} + \cdots + 11u - 3)(u^{51} - u^{50} + \cdots + 1746u + 2359)$
c_{10}	$(u^{25} + u^{24} + \cdots + u + 1)(u^{51} - 2u^{50} + \cdots + 6u + 1)$
c_{11}	$(u^{25} - 3u^{24} + \cdots + 13u - 7)(u^{51} + 2u^{50} + \cdots - 20u - 1)$
c_{12}	$(u^{25} + 3u^{24} + \cdots - 6u + 1)(u^{51} - 48u^{49} + \cdots - 2629425u - 635671)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{25} - 48y^{24} + \cdots - 3731y - 81)$ $\cdot (y^{51} - 199y^{50} + \cdots - 14350346271952y - 24840596881)$
c_2, c_7	$(y^{25} - 28y^{24} + \cdots + 97y - 9)$ $\cdot (y^{51} - 79y^{50} + \cdots + 3170864y - 157609)$
c_3	$(y^{25} - 2y^{24} + \cdots + 20y - 1)$ $\cdot (y^{51} - 25y^{50} + \cdots - 12525125y - 2325625)$
c_4	$(y^{25} - 12y^{24} + \cdots - 9y - 1)$ $\cdot (y^{51} - 67y^{50} + \cdots + 3374348243821274y - 664250673309721)$
c_5	$(y^{25} - 33y^{24} + \cdots + 697422y - 73441)$ $\cdot (y^{51} - 100y^{50} + \cdots + 13844981409y - 777350161)$
c_6, c_{10}	$(y^{25} + 15y^{24} + \cdots - 15y - 1)(y^{51} + 48y^{50} + \cdots + 156y - 1)$
c_8, c_{11}	$(y^{25} + 19y^{24} + \cdots + 29y - 49)(y^{51} + 40y^{50} + \cdots + 128y - 1)$
c_9	$(y^{25} + 4y^{24} + \cdots + 73y - 9)$ $\cdot (y^{51} - 23y^{50} + \cdots - 93576124y - 5564881)$
c_{12}	$(y^{25} - 17y^{24} + \cdots - 10y - 1)$ $\cdot (y^{51} - 96y^{50} + \cdots - 3893761828431y - 404077620241)$