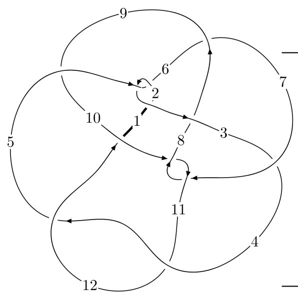
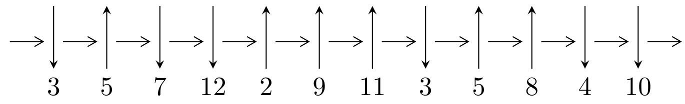
$12n_{0506}$ ($K12n_{0506}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -2.92307 \times 10^{57} u^{49} - 8.25153 \times 10^{56} u^{48} + \cdots + 4.65772 \times 10^{58} b + 1.19662 \times 10^{58},$$
$$- 3.65030 \times 10^{58} u^{49} - 7.49016 \times 10^{57} u^{48} + \cdots + 9.31544 \times 10^{58} a - 2.43552 \times 10^{59},\ u^{50} - 2u^{49} + \cdots + 4u -$$
$$I_2^u = \langle 38499u^{20} - 7436u^{19} + \cdots + 35558b - 156754,\ 37681u^{20} + 484u^{19} + \cdots + 35558a - 142970,$$
$$u^{21} + u^{20} + \cdots - 4u - 4\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 71 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.

$$\boldsymbol{I_1^u = \langle -2.92\times10^{57}u^{49} - 8.25\times10^{56}u^{48} + \cdots + 4.66\times10^{58}b + 1.20\times10^{58},\ -3.65\times10^{58}u^{49} - 7.49\times10^{57}u^{48} + \cdots + 9.32\times10^{58}a - 2.44\times10^{59},\ u^{50} - 2u^{49} + \cdots + 4u - 4\rangle}$$

(i) Arc colorings

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

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

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

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

$$a_8 = \begin{pmatrix} 0.391855u^{49} + 0.0804058u^{48} + \cdots + 18.2311u + 2.61450 \\ 0.0627575u^{49} + 0.0177158u^{48} + \cdots + 6.02426u - 0.256911 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.329097u^{49} + 0.0626900u^{48} + \cdots + 12.2069u + 2.87141 \\ 0.0627575u^{49} + 0.0177158u^{48} + \cdots + 6.02426u - 0.256911 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.269929u^{49} + 0.335316u^{48} + \cdots + 2.98112u - 9.82945 \\ 0.884089u^{49} - 0.664841u^{48} + \cdots - 6.59794u + 3.47371 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1.13386u^{49} + 1.13404u^{48} + \cdots + 2.55589u - 12.9459 \\ 0.626077u^{49} - 0.347864u^{48} + \cdots - 5.91190u + 2.87366 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1.07851u^{49} + 1.75858u^{48} + \cdots + 67.4506u - 7.31372 \\ -0.837429u^{49} + 0.432036u^{48} + \cdots - 0.0882456u - 3.75890 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1.44758u^{49} - 1.29391u^{48} + \cdots + 7.34620u - 2.10940 \\ 0.579155u^{49} - 0.441145u^{48} + \cdots - 5.55360u + 1.01483 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.00688015u^{49} + 1.00008u^{48} + \cdots + 22.7865u + 12.1643 \\ 1.25272u^{49} - 0.864448u^{48} + \cdots + 16.6689u + 2.78210 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1.91394u^{49} - 1.77626u^{48} + \cdots + 6.20475u - 1.13893 \\ 0.783142u^{49} - 0.639256u^{48} + \cdots - 4.34819u + 1.84583 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.34948u^{49} - 0.608726u^{48} + \cdots - 1.48538u - 1.03264$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{50} + 75u^{49} + \cdots - 199u + 1$
c_2, c_5	$u^{50} + u^{49} + \cdots + 37u - 1$
c_3	$u^{50} + 3u^{49} + \cdots - 622u + 257$
c_4, c_{11}	$u^{50} + 2u^{49} + \cdots - 4u - 4$
c_6	$u^{50} + 47u^{48} + \cdots - 87532u - 28244$
c_7, c_{10}	$u^{50} + 6u^{49} + \cdots - 82u - 4$
c_8	$u^{50} - u^{49} + \cdots + 3878700u + 630961$
c_9	$u^{50} - 2u^{49} + \cdots - 9207u + 307$
c_{12}	$u^{50} - 11u^{49} + \cdots - 1988004u + 270187$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{50} - 189y^{49} + \cdots - 22527y + 1$
c_2, c_5	$y^{50} + 75y^{49} + \cdots - 199y + 1$
c_3	$y^{50} - 23y^{49} + \cdots - 130398y + 66049$
c_4, c_{11}	$y^{50} - 42y^{49} + \cdots + 736y + 16$
c_6	$y^{50} + 94y^{49} + \cdots - 6283430848y + 797723536$
c_7, c_{10}	$y^{50} + 44y^{49} + \cdots - 1100y + 16$
c_8	$y^{50} - 51y^{49} + \cdots - 6506346297832y + 398111783521$
c_9	$y^{50} + 84y^{49} + \cdots - 193343697y + 94249$
c_{12}	$y^{50} - 67y^{49} + \cdots + 7872728157574y + 73001014969$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.07906$ $a = 0.456631$ $b = -0.343403$	-1.80303	-5.94880
$u = 0.648336 + 0.609293I$ $a = 0.128763 - 0.334259I$ $b = 0.106776 - 0.597923I$	$-1.18171 - 1.55259I$	$-6.05321 + 2.36458I$
$u = 0.648336 - 0.609293I$ $a = 0.128763 + 0.334259I$ $b = 0.106776 + 0.597923I$	$-1.18171 + 1.55259I$	$-6.05321 - 2.36458I$
$u = 0.811486 + 0.321287I$ $a = 0.70261 + 1.71571I$ $b = 0.205601 + 0.738871I$	$-1.33799 - 1.34735I$	$-5.76164 + 1.69141I$
$u = 0.811486 - 0.321287I$ $a = 0.70261 - 1.71571I$ $b = 0.205601 - 0.738871I$	$-1.33799 + 1.34735I$	$-5.76164 - 1.69141I$
$u = -0.104502 + 0.839206I$ $a = 0.218390 + 0.701022I$ $b = -0.927719 - 0.160877I$	$-9.87904 + 3.10011I$	$-1.02029 - 2.56068I$
$u = -0.104502 - 0.839206I$ $a = 0.218390 - 0.701022I$ $b = -0.927719 + 0.160877I$	$-9.87904 - 3.10011I$	$-1.02029 + 2.56068I$
$u = -1.16764$ $a = 0.705198$ $b = 1.36379$	-0.594673	-14.5600
$u = 0.066997 + 0.819280I$ $a = 0.063502 - 0.153656I$ $b = 0.279335 - 1.126760I$	$-1.19165 - 2.46840I$	$1.22355 + 1.33250I$
$u = 0.066997 - 0.819280I$ $a = 0.063502 + 0.153656I$ $b = 0.279335 + 1.126760I$	$-1.19165 + 2.46840I$	$1.22355 - 1.33250I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.210460 + 0.134918I$ $a = 0.158769 + 0.327791I$ $b = 0.880017 - 0.080173I$	$-3.08696 - 0.57146I$	0
$u = 1.210460 - 0.134918I$ $a = 0.158769 - 0.327791I$ $b = 0.880017 + 0.080173I$	$-3.08696 + 0.57146I$	0
$u = 0.129091 + 1.253480I$ $a = 0.291397 + 0.571233I$ $b = -0.021403 + 1.308110I$	$-3.97379 - 2.11896I$	0
$u = 0.129091 - 1.253480I$ $a = 0.291397 - 0.571233I$ $b = -0.021403 - 1.308110I$	$-3.97379 + 2.11896I$	0
$u = 1.277370 + 0.120815I$ $a = -1.23731 - 2.34133I$ $b = 0.263155 - 1.360410I$	$-7.52184 - 3.28981I$	0
$u = 1.277370 - 0.120815I$ $a = -1.23731 + 2.34133I$ $b = 0.263155 + 1.360410I$	$-7.52184 + 3.28981I$	0
$u = -0.270413 + 1.257420I$ $a = 0.228850 - 0.640041I$ $b = -0.36396 - 1.41166I$	$-14.9314 + 7.6930I$	0
$u = -0.270413 - 1.257420I$ $a = 0.228850 + 0.640041I$ $b = -0.36396 + 1.41166I$	$-14.9314 - 7.6930I$	0
$u = -1.309520 + 0.061210I$ $a = -1.00267 - 3.07061I$ $b = -0.114281 - 1.322420I$	$-17.4959 + 3.0650I$	0
$u = -1.309520 - 0.061210I$ $a = -1.00267 + 3.07061I$ $b = -0.114281 + 1.322420I$	$-17.4959 - 3.0650I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.287640 + 0.262760I$ $a = 0.161981 - 0.227519I$ $b = -0.707113 - 0.093466I$	$-4.36735 + 4.61413I$	0
$u = -1.287640 - 0.262760I$ $a = 0.161981 + 0.227519I$ $b = -0.707113 + 0.093466I$	$-4.36735 - 4.61413I$	0
$u = -1.328400 + 0.072360I$ $a = 0.44568 - 1.71849I$ $b = -0.32965 - 1.40593I$	$-8.55310 - 0.56867I$	0
$u = -1.328400 - 0.072360I$ $a = 0.44568 + 1.71849I$ $b = -0.32965 + 1.40593I$	$-8.55310 + 0.56867I$	0
$u = 1.311730 + 0.308998I$ $a = 1.04568 + 1.62480I$ $b = -0.112849 + 1.208320I$	$-5.28912 - 1.66036I$	0
$u = 1.311730 - 0.308998I$ $a = 1.04568 - 1.62480I$ $b = -0.112849 - 1.208320I$	$-5.28912 + 1.66036I$	0
$u = 1.346080 + 0.075442I$ $a = -0.20642 - 1.73825I$ $b = -0.88688 - 1.61634I$	$-18.0336 + 1.1028I$	0
$u = 1.346080 - 0.075442I$ $a = -0.20642 + 1.73825I$ $b = -0.88688 + 1.61634I$	$-18.0336 - 1.1028I$	0
$u = -1.279240 + 0.427359I$ $a = -0.775969 - 0.823176I$ $b = -0.321757 + 0.101254I$	$-13.45950 + 1.53340I$	0
$u = -1.279240 - 0.427359I$ $a = -0.775969 + 0.823176I$ $b = -0.321757 - 0.101254I$	$-13.45950 - 1.53340I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.331940 + 0.309177I$ $a = -0.48326 + 1.82025I$ $b = 0.50826 + 1.45369I$	$-5.66081 + 6.42848I$	0
$u = -1.331940 - 0.309177I$ $a = -0.48326 - 1.82025I$ $b = 0.50826 - 1.45369I$	$-5.66081 - 6.42848I$	0
$u = 1.349410 + 0.336328I$ $a = -0.525442 + 0.560601I$ $b = -1.37321 + 0.35227I$	$-14.4886 - 7.2876I$	0
$u = 1.349410 - 0.336328I$ $a = -0.525442 - 0.560601I$ $b = -1.37321 - 0.35227I$	$-14.4886 + 7.2876I$	0
$u = 0.082394 + 0.547321I$ $a = 0.986098 - 0.631149I$ $b = -0.170671 - 0.044166I$	$-0.14617 - 1.49325I$	$-0.46873 + 5.87257I$
$u = 0.082394 - 0.547321I$ $a = 0.986098 + 0.631149I$ $b = -0.170671 + 0.044166I$	$-0.14617 + 1.49325I$	$-0.46873 - 5.87257I$
$u = -0.414715 + 0.288195I$ $a = 0.101777 + 1.365910I$ $b = 0.631123 + 0.377678I$	$1.14736 + 1.01845I$	$7.01184 - 3.19514I$
$u = -0.414715 - 0.288195I$ $a = 0.101777 - 1.365910I$ $b = 0.631123 - 0.377678I$	$1.14736 - 1.01845I$	$7.01184 + 3.19514I$
$u = -1.43825 + 0.45806I$ $a = 0.93844 - 1.62626I$ $b = -0.247398 - 1.377560I$	$-9.15198 + 7.96076I$	0
$u = -1.43825 - 0.45806I$ $a = 0.93844 + 1.62626I$ $b = -0.247398 + 1.377560I$	$-9.15198 - 7.96076I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.50629+0.48152I$ $a = 0.63158+1.81709I$ $b = -0.49334+1.56307I$	$18.8663-13.7470I$	0
$u = 1.50629-0.48152I$ $a = 0.63158-1.81709I$ $b = -0.49334-1.56307I$	$18.8663+13.7470I$	0
$u = 1.50100+0.52835I$ $a = -0.44313-1.51722I$ $b = 0.24879-1.45359I$	$-8.62936-4.54432I$	0
$u = 1.50100-0.52835I$ $a = -0.44313+1.51722I$ $b = 0.24879+1.45359I$	$-8.62936+4.54432I$	0
$u = 0.121767+0.292619I$ $a = -0.22430-2.50528I$ $b = 0.063783+1.250300I$	$-3.84376+1.74410I$	$-5.80851-2.56777I$
$u = 0.121767-0.292619I$ $a = -0.22430+2.50528I$ $b = 0.063783-1.250300I$	$-3.84376-1.74410I$	$-5.80851+2.56777I$
$u = -1.49544+0.79557I$ $a = -0.698551+1.169030I$ $b = -0.131534+1.396950I$	$-18.4852-0.1786I$	0
$u = -1.49544-0.79557I$ $a = -0.698551-1.169030I$ $b = -0.131534-1.396950I$	$-18.4852+0.1786I$	0
$u = -0.058061+0.206058I$ $a = 4.91262+4.09459I$ $b = -0.49528+1.32653I$	$-13.42200-2.14669I$	$-3.56304+0.04666I$
$u = -0.058061-0.206058I$ $a = 4.91262-4.09459I$ $b = -0.49528-1.32653I$	$-13.42200+2.14669I$	$-3.56304-0.04666I$

II. $\boldsymbol{I_2^u = \langle 38499u^{20} - 7436u^{19} + \cdots + 35558b - 156754,\ 37681u^{20} + 484u^{19} + \cdots + 35558a - 142970,\ u^{21} + u^{20} + \cdots - 4u - 4\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -1.05971u^{20} - 0.0136116u^{19} + \cdots + 4.51401u + 4.02075 \\ -1.08271u^{20} + 0.209123u^{19} + \cdots + 1.96665u + 4.40840 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.0230047u^{20} - 0.222735u^{19} + \cdots + 2.54736u - 0.387648 \\ -1.08271u^{20} + 0.209123u^{19} + \cdots + 1.96665u + 4.40840 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 0.723649u^{20} - 0.307821u^{19} + \cdots - 1.97356u - 1.22588 \\ 0.0756229u^{20} - 0.244418u^{19} + \cdots - 0.692727u + 0.527645 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0.714902u^{20} + 0.122827u^{19} + \cdots - 0.881546u - 2.17386 \\ -1.16677u^{20} + 0.221047u^{19} + \cdots - 0.0621520u + 3.23320 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.340767u^{20} + 0.344592u^{19} + \cdots + 2.83759u + 0.174982 \\ -0.372968u^{20} + 0.0989088u^{19} + \cdots + 0.383767u + 2.08679 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -0.690885u^{20} + 0.802337u^{19} + \cdots + 3.67549u + 2.22392 \\ -0.822797u^{20} + 0.594803u^{19} + \cdots + 2.71444u + 3.44429 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -0.372659u^{20} + 0.935767u^{19} + \cdots + 0.0702233u + 0.387198 \\ -0.877608u^{20} + 1.04604u^{19} + \cdots + 1.58693u + 0.580629 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -0.950799u^{20} + 0.416657u^{19} + \cdots + 2.92770u + 2.18803 \\ -0.476152u^{20} + 0.150515u^{19} + \cdots + 1.91951u + 2.97711 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{19570}{17779}u^{20} + \frac{17174}{17779}u^{19} + \cdots + \frac{45070}{17779}u - \frac{25746}{17779}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{21}-24u^{20}+\cdots+16u+1$
c_2	$u^{21}+12u^{19}+\cdots-4u-1$
c_3	$u^{21}+2u^{20}+\cdots+u-7$
c_4	$u^{21}-u^{20}+\cdots-4u+4$
c_5	$u^{21}+12u^{19}+\cdots-4u+1$
c_6	$u^{21}-u^{20}+\cdots+20u+4$
c_7	$u^{21}+5u^{20}+\cdots+34u+4$
c_8	$u^{21}-3u^{19}+\cdots+5u+1$
c_9	$u^{21}+u^{20}+\cdots+2u-1$
c_{10}	$u^{21}-5u^{20}+\cdots+34u-4$
c_{11}	$u^{21}+u^{20}+\cdots-4u-4$
c_{12}	$u^{21}-2u^{20}+\cdots+47u+7$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{21} - 44y^{20} + \cdots + 232y - 1$
c_2, c_5	$y^{21} + 24y^{20} + \cdots + 16y - 1$
c_3	$y^{21} - 6y^{20} + \cdots + 239y - 49$
c_4, c_{11}	$y^{21} - 17y^{20} + \cdots - 32y - 16$
c_6	$y^{21} + 19y^{20} + \cdots + 352y - 16$
c_7, c_{10}	$y^{21} + 17y^{20} + \cdots + 12y - 16$
c_8	$y^{21} - 6y^{20} + \cdots + 29y - 1$
c_9	$y^{21} + 13y^{20} + \cdots + 6y - 1$
c_{12}	$y^{21} - 14y^{20} + \cdots + 67y - 49$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.053654 + 0.994034I$ $a = -0.118262 - 0.157903I$ $b = 0.261258 - 1.096940I$	$-1.82196 - 3.31723I$	$-3.56279 + 6.27419I$
$u = 0.053654 - 0.994034I$ $a = -0.118262 + 0.157903I$ $b = 0.261258 + 1.096940I$	$-1.82196 + 3.31723I$	$-3.56279 - 6.27419I$
$u = -1.006310 + 0.386972I$ $a = -0.001299 - 0.196953I$ $b = -0.510619 - 1.094680I$	$-14.5544 + 3.5199I$	$-7.00930 - 3.34595I$
$u = -1.006310 - 0.386972I$ $a = -0.001299 + 0.196953I$ $b = -0.510619 + 1.094680I$	$-14.5544 - 3.5199I$	$-7.00930 + 3.34595I$
$u = 1.07842$ $a = 0.535095$ $b = 1.10310$	-0.187749	6.00000
$u = 0.727444 + 0.493982I$ $a = -0.187671 - 0.933435I$ $b = 0.329896 - 0.180152I$	$-0.14218 - 1.80240I$	$2.07850 + 4.52264I$
$u = 0.727444 - 0.493982I$ $a = -0.187671 + 0.933435I$ $b = 0.329896 + 0.180152I$	$-0.14218 + 1.80240I$	$2.07850 - 4.52264I$
$u = 0.712915 + 0.901061I$ $a = 0.383343 + 0.651191I$ $b = 0.098075 + 1.273330I$	$-3.65276 - 0.25703I$	$-6.52769 - 0.27177I$
$u = 0.712915 - 0.901061I$ $a = 0.383343 - 0.651191I$ $b = 0.098075 - 1.273330I$	$-3.65276 + 0.25703I$	$-6.52769 + 0.27177I$
$u = 1.239990 + 0.303227I$ $a = -0.83651 - 2.17539I$ $b = 0.22167 - 1.41775I$	$-5.86381 - 4.09879I$	$-5.03465 + 3.45560I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.239990 - 0.303227I$ $a = -0.83651 + 2.17539I$ $b = 0.22167 + 1.41775I$	$-5.86381 + 4.09879I$	$-5.03465 - 3.45560I$
$u = -1.261550 + 0.269071I$ $a = -0.62409 + 2.26542I$ $b = -0.366033 + 1.347970I$	$-15.6653 - 0.5794I$	$-6.15872 - 0.08532I$
$u = -1.261550 - 0.269071I$ $a = -0.62409 - 2.26542I$ $b = -0.366033 - 1.347970I$	$-15.6653 + 0.5794I$	$-6.15872 + 0.08532I$
$u = -1.279400 + 0.192903I$ $a = 0.332530 - 0.511316I$ $b = 1.066330 - 0.560224I$	$-3.93246 + 2.61822I$	$-7.09974 - 2.69906I$
$u = -1.279400 - 0.192903I$ $a = 0.332530 + 0.511316I$ $b = 1.066330 + 0.560224I$	$-3.93246 - 2.61822I$	$-7.09974 + 2.69906I$
$u = 1.348700 + 0.186645I$ $a = 1.03417 + 1.35712I$ $b = -0.146518 + 1.073210I$	$-6.54748 - 0.69924I$	$-7.57202 - 0.34785I$
$u = 1.348700 - 0.186645I$ $a = 1.03417 - 1.35712I$ $b = -0.146518 - 1.073210I$	$-6.54748 + 0.69924I$	$-7.57202 + 0.34785I$
$u = -1.41010 + 0.39622I$ $a = -0.58101 + 1.57427I$ $b = 0.498672 + 1.276340I$	$-6.71074 + 8.26508I$	$-4.78242 - 6.51636I$
$u = -1.41010 - 0.39622I$ $a = -0.58101 - 1.57427I$ $b = 0.498672 - 1.276340I$	$-6.71074 - 8.26508I$	$-4.78242 + 6.51636I$
$u = -0.164557 + 0.384273I$ $a = -0.66874 + 2.46746I$ $b = 0.495722 + 0.644048I$	$-0.232681 - 0.315786I$	$-1.33114 - 1.22918I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.164557 - 0.384273I$ $a = -0.66874 - 2.46746I$ $b = 0.495722 - 0.644048I$	$-0.232681 + 0.315786I$	$-1.33114 + 1.22918I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{21} - 24u^{20} + \cdots + 16u + 1)(u^{50} + 75u^{49} + \cdots - 199u + 1)$
c_2	$(u^{21} + 12u^{19} + \cdots - 4u - 1)(u^{50} + u^{49} + \cdots + 37u - 1)$
c_3	$(u^{21} + 2u^{20} + \cdots + u - 7)(u^{50} + 3u^{49} + \cdots - 622u + 257)$
c_4	$(u^{21} - u^{20} + \cdots - 4u + 4)(u^{50} + 2u^{49} + \cdots - 4u - 4)$
c_5	$(u^{21} + 12u^{19} + \cdots - 4u + 1)(u^{50} + u^{49} + \cdots + 37u - 1)$
c_6	$(u^{21} - u^{20} + \cdots + 20u + 4)(u^{50} + 47u^{48} + \cdots - 87532u - 28244)$
c_7	$(u^{21} + 5u^{20} + \cdots + 34u + 4)(u^{50} + 6u^{49} + \cdots - 82u - 4)$
c_8	$(u^{21} - 3u^{19} + \cdots + 5u + 1)(u^{50} - u^{49} + \cdots + 3878700u + 630961)$
c_9	$(u^{21} + u^{20} + \cdots + 2u - 1)(u^{50} - 2u^{49} + \cdots - 9207u + 307)$
c_{10}	$(u^{21} - 5u^{20} + \cdots + 34u - 4)(u^{50} + 6u^{49} + \cdots - 82u - 4)$
c_{11}	$(u^{21} + u^{20} + \cdots - 4u - 4)(u^{50} + 2u^{49} + \cdots - 4u - 4)$
c_{12}	$(u^{21} - 2u^{20} + \cdots + 47u + 7)(u^{50} - 11u^{49} + \cdots - 1988004u + 270187)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{21}-44y^{20}+\cdots+232y-1)(y^{50}-189y^{49}+\cdots-22527y+1)$
c_2, c_5	$(y^{21}+24y^{20}+\cdots+16y-1)(y^{50}+75y^{49}+\cdots-199y+1)$
c_3	$(y^{21}-6y^{20}+\cdots+239y-49)(y^{50}-23y^{49}+\cdots-130398y+66049)$
c_4, c_{11}	$(y^{21}-17y^{20}+\cdots-32y-16)(y^{50}-42y^{49}+\cdots+736y+16)$
c_6	$(y^{21}+19y^{20}+\cdots+352y-16)$ $\cdot(y^{50}+94y^{49}+\cdots-6283430848y+797723536)$
c_7, c_{10}	$(y^{21}+17y^{20}+\cdots+12y-16)(y^{50}+44y^{49}+\cdots-1100y+16)$
c_8	$(y^{21}-6y^{20}+\cdots+29y-1)$ $\cdot(y^{50}-51y^{49}+\cdots-6506346297832y+398111783521)$
c_9	$(y^{21}+13y^{20}+\cdots+6y-1)$ $\cdot(y^{50}+84y^{49}+\cdots-193343697y+94249)$
c_{12}	$(y^{21}-14y^{20}+\cdots+67y-49)$ $\cdot(y^{50}-67y^{49}+\cdots+7872728157574y+73001014969)$