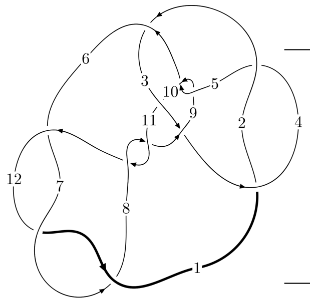
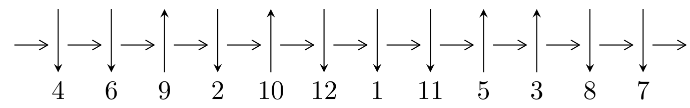
$12a_{0911}$ $(K12a_{0911})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 2.55005 \times 10^{55} u^{99} + 1.78130 \times 10^{55} u^{98} + \cdots + 1.02735 \times 10^{54} b - 1.90596 \times 10^{55},$$
$$- 2.30960 \times 10^{54} u^{99} - 2.60296 \times 10^{53} u^{98} + \cdots + 1.02735 \times 10^{54} a + 2.71064 \times 10^{54},\ u^{100} + 2u^{99} + \cdots + u -$$
$$I_2^u = \langle 2u^4 - 2u^3 - 7u^2 + 7b - 2u - 1,\ 6u^4 + 8u^3 - 7u^2 + 7a - 6u + 4,\ u^5 + u^4 - 2u^3 - u^2 + u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 105 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.

$I^u_1 = \langle 2.55\times10^{55}u^{99}+1.78\times10^{55}u^{98}+\cdots+1.03\times10^{54}b-1.91\times10^{55},\ -2.31\times10^{54}u^{99}-2.60\times10^{53}u^{98}+\cdots+1.03\times10^{54}a+2.71\times10^{54},\ u^{100}+2u^{99}+\cdots+u-1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_8 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_7 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}u\\-u^3+u\end{pmatrix}$$

$$a_3 = \begin{pmatrix}2.24811u^{99}+0.253365u^{98}+\cdots-0.644151u-2.63847\\-24.8215u^{99}-17.3387u^{98}+\cdots-31.6225u+18.5521\end{pmatrix}$$

$$a_6 = \begin{pmatrix}-u^2+1\\u^4-2u^2\end{pmatrix}$$

$$a_2 = \begin{pmatrix}-12.8554u^{99}-10.3071u^{98}+\cdots-19.7406u+8.23996\\-33.1829u^{99}-22.7159u^{98}+\cdots-41.6270u+24.6702\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-u^3+2u\\-u^3+u\end{pmatrix}$$

$$a_9 = \begin{pmatrix}u^6-3u^4+2u^2+1\\u^6-2u^4+u^2\end{pmatrix}$$

$$a_4 = \begin{pmatrix}-11.4644u^{99}-9.40616u^{98}+\cdots-18.1363u+7.33735\\-43.7815u^{99}-29.8900u^{98}+\cdots-57.0219u+32.7738\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}-0.735233u^{99}-0.0386406u^{98}+\cdots-3.61695u+0.645082\\19.0168u^{99}+13.0073u^{98}+\cdots+23.4427u-14.2277\end{pmatrix}$$

$$a_5 = \begin{pmatrix}3.85489u^{99}+2.47469u^{98}+\cdots+4.29212u-2.64226\\-15.8972u^{99}-10.5712u^{98}+\cdots-22.7675u+12.2305\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 76.2668u^{99}+56.8751u^{98}+\cdots+75.3902u-55.1984$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{100} - 6u^{99} + \cdots + 1149u - 49$
c_2	$7(7u^{100} + 35u^{99} + \cdots + 385706u - 40879)$
c_3	$7(7u^{100} - 147u^{99} + \cdots - 311196u - 14099)$
c_5, c_9	$u^{100} + 2u^{99} + \cdots + 5u + 1$
c_6, c_7, c_{12}	$u^{100} + 2u^{99} + \cdots + u - 1$
c_8, c_{11}	$u^{100} - 6u^{99} + \cdots + 25745u - 4025$
c_{10}	$u^{100} + 3u^{99} + \cdots + 17472u + 1568$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{100} - 54y^{99} + \cdots - 355685y + 2401$
c_2	$49(49y^{100} - 12187y^{99} + \cdots - 3.62058 \times 10^{10}y + 1.67109 \times 10^{9})$
c_3	$49(49y^{100} - 14049y^{99} + \cdots - 6.34678 \times 10^{10}y + 1.98782 \times 10^{8})$
c_5, c_9	$y^{100} - 54y^{99} + \cdots - 7y + 1$
c_6, c_7, c_{12}	$y^{100} - 82y^{99} + \cdots - 7y + 1$
c_8, c_{11}	$y^{100} + 70y^{99} + \cdots - 361276175y + 16200625$
c_{10}	$y^{100} - 33y^{99} + \cdots - 259083776y + 2458624$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.066180 + 0.860765I$ $a = 0.87155 - 2.12153I$ $b = 0.61301 - 1.78801I$	$7.76831 + 1.78382I$	0
$u = 0.066180 - 0.860765I$ $a = 0.87155 + 2.12153I$ $b = 0.61301 + 1.78801I$	$7.76831 - 1.78382I$	0
$u = 0.125303 + 0.844813I$ $a = 0.00052 + 3.24559I$ $b = 0.34459 + 2.71163I$	$5.8756 - 13.5209I$	0
$u = 0.125303 - 0.844813I$ $a = 0.00052 - 3.24559I$ $b = 0.34459 - 2.71163I$	$5.8756 + 13.5209I$	0
$u = -0.135762 + 0.841793I$ $a = -0.00022 + 2.29080I$ $b = -0.26671 + 1.96639I$	$2.30679 + 7.72312I$	0
$u = -0.135762 - 0.841793I$ $a = -0.00022 - 2.29080I$ $b = -0.26671 - 1.96639I$	$2.30679 - 7.72312I$	0
$u = 0.084808 + 0.824876I$ $a = -0.25875 - 3.34323I$ $b = -0.49311 - 2.87868I$	$8.93550 - 6.71171I$	$0. + 5.58180I$
$u = 0.084808 - 0.824876I$ $a = -0.25875 + 3.34323I$ $b = -0.49311 + 2.87868I$	$8.93550 + 6.71171I$	$0. - 5.58180I$
$u = 1.118570 + 0.355935I$ $a = -0.411676 + 1.064340I$ $b = 1.17459 + 1.01033I$	$4.54352 - 1.52298I$	0
$u = 1.118570 - 0.355935I$ $a = -0.411676 - 1.064340I$ $b = 1.17459 - 1.01033I$	$4.54352 + 1.52298I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.063459 + 0.823553I$ $a = 0.01587 - 2.41880I$ $b = 0.28053 - 1.98760I$	$5.17789 + 2.75522I$	0
$u = -0.063459 - 0.823553I$ $a = 0.01587 + 2.41880I$ $b = 0.28053 + 1.98760I$	$5.17789 - 2.75522I$	0
$u = 0.133069 + 0.812087I$ $a = -1.17414 + 1.37179I$ $b = -0.71986 + 1.37933I$	$7.53948 - 2.72894I$	$0. + 4.33750I$
$u = 0.133069 - 0.812087I$ $a = -1.17414 - 1.37179I$ $b = -0.71986 - 1.37933I$	$7.53948 + 2.72894I$	$0. - 4.33750I$
$u = -1.108750 + 0.404553I$ $a = 1.233170 + 0.565323I$ $b = -0.21427 + 1.54803I$	$-0.67251 - 3.23097I$	0
$u = -1.108750 - 0.404553I$ $a = 1.233170 - 0.565323I$ $b = -0.21427 - 1.54803I$	$-0.67251 + 3.23097I$	0
$u = 1.127540 + 0.406548I$ $a = -1.80128 + 0.82756I$ $b = 0.19262 + 2.25353I$	$2.80795 + 9.01655I$	0
$u = 1.127540 - 0.406548I$ $a = -1.80128 - 0.82756I$ $b = 0.19262 - 2.25353I$	$2.80795 - 9.01655I$	0
$u = -1.20312$ $a = 0.236367$ $b = -0.701550$	-2.51628	0
$u = -0.026000 + 0.786577I$ $a = -4.29155 - 2.82581I$ $b = -2.37520 - 1.76189I$	$4.40963 + 0.13433I$	$-4.43140 + 2.83159I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.026000 - 0.786577I$ $a = -4.29155 + 2.82581I$ $b = -2.37520 + 1.76189I$	$4.40963 - 0.13433I$	$-4.43140 - 2.83159I$
$u = -0.072981 + 0.768562I$ $a = 1.287060 + 0.166439I$ $b = 1.65682 + 0.13967I$	$2.78890 + 4.95396I$	$-0.93576 - 7.70957I$
$u = -0.072981 - 0.768562I$ $a = 1.287060 - 0.166439I$ $b = 1.65682 - 0.13967I$	$2.78890 - 4.95396I$	$-0.93576 + 7.70957I$
$u = -0.603154 + 0.480578I$ $a = 0.531251 + 0.247738I$ $b = -0.116625 - 0.232744I$	$-2.41423 + 3.09068I$	$-4.65212 - 8.27933I$
$u = -0.603154 - 0.480578I$ $a = 0.531251 - 0.247738I$ $b = -0.116625 + 0.232744I$	$-2.41423 - 3.09068I$	$-4.65212 + 8.27933I$
$u = 1.179710 + 0.372781I$ $a = 1.87644 - 0.67092I$ $b = -0.29893 - 2.56412I$	$5.58223 + 2.39089I$	0
$u = 1.179710 - 0.372781I$ $a = 1.87644 + 0.67092I$ $b = -0.29893 + 2.56412I$	$5.58223 - 2.39089I$	0
$u = -1.208580 + 0.298352I$ $a = 0.138130 + 0.798805I$ $b = -1.39785 - 0.70786I$	$-0.659627 - 1.083600I$	0
$u = -1.208580 - 0.298352I$ $a = 0.138130 - 0.798805I$ $b = -1.39785 + 0.70786I$	$-0.659627 + 1.083600I$	0
$u = -0.368759 + 0.658434I$ $a = -0.200364 + 0.148708I$ $b = 0.192399 + 0.236039I$	$-1.61628 + 0.90792I$	$0.73056 + 3.87410I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.368759 - 0.658434I$ $a = -0.200364 - 0.148708I$ $b = 0.192399 - 0.236039I$	$-1.61628 - 0.90792I$	$0.73056 - 3.87410I$
$u = 0.046166 + 0.753218I$ $a = 0.29339 + 1.60136I$ $b = -0.337923 + 1.301070I$	$1.06739 - 1.59292I$	$-4.21907 + 0.71852I$
$u = 0.046166 - 0.753218I$ $a = 0.29339 - 1.60136I$ $b = -0.337923 - 1.301070I$	$1.06739 + 1.59292I$	$-4.21907 - 0.71852I$
$u = -1.207020 + 0.373783I$ $a = -1.187900 - 0.686360I$ $b = 0.29346 - 1.83954I$	$1.66457 + 1.55604I$	0
$u = -1.207020 - 0.373783I$ $a = -1.187900 + 0.686360I$ $b = 0.29346 + 1.83954I$	$1.66457 - 1.55604I$	0
$u = 1.26388$ $a = -10.1850$ $b = 15.3307$	-3.96123	0
$u = 1.199860 + 0.413091I$ $a = 0.88673 - 1.23671I$ $b = -0.98804 - 1.51467I$	$4.27981 - 6.34812I$	0
$u = 1.199860 - 0.413091I$ $a = 0.88673 + 1.23671I$ $b = -0.98804 + 1.51467I$	$4.27981 + 6.34812I$	0
$u = 0.535734 + 0.490182I$ $a = -0.857560 + 0.337611I$ $b = 0.035042 - 0.510932I$	$0.80071 - 9.15581I$	$-3.31075 + 8.99009I$
$u = 0.535734 - 0.490182I$ $a = -0.857560 - 0.337611I$ $b = 0.035042 + 0.510932I$	$0.80071 + 9.15581I$	$-3.31075 - 8.99009I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.026695 + 0.718976I$ $a = -0.03361 + 3.09163I$ $b = -0.29804 + 2.61186I$	$0.46493 - 1.57636I$	$-3.62391 + 3.74056I$
$u = 0.026695 - 0.718976I$ $a = -0.03361 - 3.09163I$ $b = -0.29804 - 2.61186I$	$0.46493 + 1.57636I$	$-3.62391 - 3.74056I$
$u = 1.244710 + 0.302263I$ $a = -1.125240 + 0.246242I$ $b = 0.684228 + 0.684322I$	$-2.61355 - 2.20912I$	0
$u = 1.244710 - 0.302263I$ $a = -1.125240 - 0.246242I$ $b = 0.684228 - 0.684322I$	$-2.61355 + 2.20912I$	0
$u = 0.425289 + 0.569271I$ $a = 0.679374 + 0.345318I$ $b = -0.322505 + 0.245223I$	$1.16837 + 5.35171I$	$-2.33945 - 3.24419I$
$u = 0.425289 - 0.569271I$ $a = 0.679374 - 0.345318I$ $b = -0.322505 - 0.245223I$	$1.16837 - 5.35171I$	$-2.33945 + 3.24419I$
$u = -1.247730 + 0.335150I$ $a = 0.14268 - 2.59678I$ $b = 1.90497 - 1.37567I$	$0.63837 + 3.90975I$	0
$u = -1.247730 - 0.335150I$ $a = 0.14268 + 2.59678I$ $b = 1.90497 + 1.37567I$	$0.63837 - 3.90975I$	0
$u = 1.302980 + 0.076339I$ $a = -0.177078 - 0.842270I$ $b = 0.451240 + 0.097844I$	$-4.78110 - 2.15974I$	0
$u = 1.302980 - 0.076339I$ $a = -0.177078 + 0.842270I$ $b = 0.451240 - 0.097844I$	$-4.78110 + 2.15974I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.276810 + 0.291243I$ $a = -1.64166 + 0.89025I$ $b = 1.52030 + 2.34735I$	$-3.42645 - 2.04331I$	0
$u = 1.276810 - 0.291243I$ $a = -1.64166 - 0.89025I$ $b = 1.52030 - 2.34735I$	$-3.42645 + 2.04331I$	0
$u = -1.31785$ $a = 0.616471$ $b = -0.733009$	-2.21898	0
$u = -1.329660 + 0.009805I$ $a = 0.667787 - 0.376017I$ $b = 1.83737 - 0.03557I$	$-7.24915 + 0.12420I$	0
$u = -1.329660 - 0.009805I$ $a = 0.667787 + 0.376017I$ $b = 1.83737 + 0.03557I$	$-7.24915 - 0.12420I$	0
$u = 1.286520 + 0.342616I$ $a = 3.62577 + 1.50468I$ $b = 3.04784 - 2.13233I$	$0.32064 - 4.20537I$	0
$u = 1.286520 - 0.342616I$ $a = 3.62577 - 1.50468I$ $b = 3.04784 + 2.13233I$	$0.32064 + 4.20537I$	0
$u = -1.295980 + 0.307916I$ $a = 1.52481 + 0.84597I$ $b = -0.74775 + 3.02913I$	$-3.68022 + 5.30134I$	0
$u = -1.295980 - 0.307916I$ $a = 1.52481 - 0.84597I$ $b = -0.74775 - 3.02913I$	$-3.68022 - 5.30134I$	0
$u = 1.336150 + 0.037532I$ $a = -0.668166 - 1.189430I$ $b = -0.974750 - 0.539922I$	$-6.23871 - 3.34970I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.336150 - 0.037532I$ $a = -0.668166 + 1.189430I$ $b = -0.974750 + 0.539922I$	$-6.23871 + 3.34970I$	0
$u = -1.334610 + 0.104729I$ $a = -0.401638 - 0.914443I$ $b = -0.867103 - 0.055077I$	$-1.56741 + 5.50751I$	0
$u = -1.334610 - 0.104729I$ $a = -0.401638 + 0.914443I$ $b = -0.867103 + 0.055077I$	$-1.56741 - 5.50751I$	0
$u = -1.302260 + 0.324685I$ $a = 0.584203 + 0.491239I$ $b = -0.02040 + 1.86856I$	$-3.15215 + 5.49182I$	0
$u = -1.302260 - 0.324685I$ $a = 0.584203 - 0.491239I$ $b = -0.02040 - 1.86856I$	$-3.15215 - 5.49182I$	0
$u = 1.314960 + 0.333665I$ $a = -0.223233 - 0.758788I$ $b = -1.76656 + 0.86515I$	$-1.55939 - 8.93980I$	0
$u = 1.314960 - 0.333665I$ $a = -0.223233 + 0.758788I$ $b = -1.76656 - 0.86515I$	$-1.55939 + 8.93980I$	0
$u = 1.312470 + 0.363962I$ $a = 1.36690 - 0.90680I$ $b = -0.79085 - 1.96456I$	$0.87397 - 7.02667I$	0
$u = 1.312470 - 0.363962I$ $a = 1.36690 + 0.90680I$ $b = -0.79085 + 1.96456I$	$0.87397 + 7.02667I$	0
$u = -1.314330 + 0.390094I$ $a = -1.37366 - 0.34309I$ $b = -0.22659 - 1.87215I$	$3.45510 + 2.70339I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.314330 - 0.390094I$ $a = -1.37366 + 0.34309I$ $b = -0.22659 + 1.87215I$	$3.45510 - 2.70339I$	0
$u = -1.325260 + 0.363911I$ $a = -1.78448 - 1.24566I$ $b = 1.18856 - 2.94620I$	$4.51646 + 10.99010I$	0
$u = -1.325260 - 0.363911I$ $a = -1.78448 + 1.24566I$ $b = 1.18856 + 2.94620I$	$4.51646 - 10.99010I$	0
$u = -1.37954$ $a = 0.525786$ $b = -0.307804$	-2.27657	0
$u = -1.354270 + 0.350897I$ $a = 1.105460 - 0.077103I$ $b = 0.31851 + 1.50383I$	$2.85303 + 6.92434I$	0
$u = -1.354270 - 0.350897I$ $a = 1.105460 + 0.077103I$ $b = 0.31851 - 1.50383I$	$2.85303 - 6.92434I$	0
$u = -1.351770 + 0.370394I$ $a = 1.77739 + 1.17880I$ $b = -0.84705 + 2.89589I$	$1.2299 + 17.8925I$	0
$u = -1.351770 - 0.370394I$ $a = 1.77739 - 1.17880I$ $b = -0.84705 - 2.89589I$	$1.2299 - 17.8925I$	0
$u = 1.356960 + 0.367547I$ $a = -1.26141 + 0.86468I$ $b = 0.72317 + 2.11532I$	$-2.39184 - 12.07600I$	0
$u = 1.356960 - 0.367547I$ $a = -1.26141 - 0.86468I$ $b = 0.72317 - 2.11532I$	$-2.39184 + 12.07600I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.403610+0.172759I$ $a=-0.357432+0.140146I$ $b=\ \ 0.045150+0.705809I$	$-4.64740-2.81144I$	0
$u=-1.403610-0.172759I$ $a=-0.357432-0.140146I$ $b=\ \ 0.045150-0.705809I$	$-4.64740+2.81144I$	0
$u=-1.40977+0.11256I$ $a=\ \ 0.350963+0.532406I$ $b=\ \ 0.973998-0.537090I$	$-5.38865+11.04220I$	0
$u=-1.40977-0.11256I$ $a=\ \ 0.350963-0.532406I$ $b=\ \ 0.973998+0.537090I$	$-5.38865-11.04220I$	0
$u=\ \ 0.467110+0.337848I$ $a=-0.393316-0.183041I$ $b=\ \ 0.684027-0.159400I$	$3.31994+0.86651I$	$0.20729+2.64307I$
$u=\ \ 0.467110-0.337848I$ $a=-0.393316+0.183041I$ $b=\ \ 0.684027+0.159400I$	$3.31994-0.86651I$	$0.20729-2.64307I$
$u=\ \ 1.42891+0.10467I$ $a=-0.245132+0.379566I$ $b=-0.596256-0.199428I$	$-8.90921-4.87685I$	0
$u=\ \ 1.42891-0.10467I$ $a=-0.245132-0.379566I$ $b=-0.596256+0.199428I$	$-8.90921+4.87685I$	0
$u=\ \ 0.366259+0.423550I$ $a=\ \ 0.494904-1.198700I$ $b=-0.184808+0.420618I$	$3.66081-3.79622I$	$0.61652+6.81445I$
$u=\ \ 0.366259-0.423550I$ $a=\ \ 0.494904+1.198700I$ $b=-0.184808-0.420618I$	$3.66081+3.79622I$	$0.61652-6.81445I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.43401 + 0.23684I$ $a = 0.0739934 + 0.0177622I$ $b = -0.028722 + 0.371217I$	$-7.39038 - 4.13584I$	0
$u = 1.43401 - 0.23684I$ $a = 0.0739934 - 0.0177622I$ $b = -0.028722 - 0.371217I$	$-7.39038 + 4.13584I$	0
$u = -0.394376 + 0.192389I$ $a = 2.48574 - 1.37904I$ $b = 0.140530 + 0.493595I$	$-1.01019 + 2.66805I$	$-7.45912 - 8.19865I$
$u = -0.394376 - 0.192389I$ $a = 2.48574 + 1.37904I$ $b = 0.140530 - 0.493595I$	$-1.01019 - 2.66805I$	$-7.45912 + 8.19865I$
$u = -0.228390 + 0.315226I$ $a = 0.343800 - 0.503868I$ $b = -0.014070 + 0.387664I$	$-0.128347 + 0.852424I$	$-3.12509 - 7.92655I$
$u = -0.228390 - 0.315226I$ $a = 0.343800 + 0.503868I$ $b = -0.014070 - 0.387664I$	$-0.128347 - 0.852424I$	$-3.12509 + 7.92655I$
$u = 0.359461$ $a = -3.42432$ $b = -0.325755$	-2.17491	-8.86230
$u = -0.140389 + 0.309477I$ $a = 0.29923 + 1.54706I$ $b = -0.33446 + 1.69351I$	$-0.198785 - 0.797982I$	$1.07929 - 8.34309I$
$u = -0.140389 - 0.309477I$ $a = 0.29923 - 1.54706I$ $b = -0.33446 - 1.69351I$	$-0.198785 + 0.797982I$	$1.07929 + 8.34309I$
$u = 0.337339$ $a = -3.34460$ $b = -0.411638$	-2.17651	-7.62400

II. $I_2^u = \langle 2u^4 - 2u^3 - 7u^2 + 7b - 2u - 1,\ 6u^4 + 8u^3 - 7u^2 + 7a - 6u + 4,\ u^5 + u^4 - 2u^3 - u^2 + u - 1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -\frac{6}{7}u^4 - \frac{8}{7}u^3 + u^2 + \frac{6}{7}u - \frac{4}{7} \\ -\frac{2}{7}u^4 + \frac{2}{7}u^3 + u^2 + \frac{2}{7}u + \frac{1}{7} \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^4 - u^3 + 2u^2 + u - 1 \\ -\frac{4}{7}u^4 + \frac{4}{7}u^3 + \cdots + \frac{4}{7}u + \frac{2}{7} \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^3 + 2u \\ -u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^3 + 2u \\ u^4 - u^3 - u^2 + 2u - 1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -u^4 - u^3 + 2u^2 + u - 1 \\ -\frac{4}{7}u^4 + \frac{4}{7}u^3 + \cdots - \frac{3}{7}u + \frac{2}{7} \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^3 + 2u \\ -u^3 + u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ -u \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{143}{49}u^4 - \frac{514}{49}u^3 - \frac{44}{7}u^2 + \frac{767}{49}u - \frac{726}{49}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u-1)^5$
c_2	$7(7u^5-30u^4+41u^3-26u^2+8u-1)$
c_3	$7(7u^5+12u^4+2u^3+7u^2+1)$
c_4	$(u+1)^5$
c_5	$u^5-u^4+2u^3-u^2+u-1$
c_6, c_7	$u^5+u^4-2u^3-u^2+u-1$
c_8	$u^5-3u^4+4u^3-u^2-u+1$
c_9	$u^5+u^4+2u^3+u^2+u+1$
c_{10}	u^5
c_{11}	$u^5+3u^4+4u^3+u^2-u-1$
c_{12}	$u^5-u^4-2u^3+u^2+u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$(y-1)^5$
c_2	$49(49y^5 - 326y^4 + 233y^3 - 80y^2 + 12y - 1)$
c_3	$49(49y^5 - 116y^4 - 164y^3 - 73y^2 - 14y - 1)$
c_5, c_9	$y^5 + 3y^4 + 4y^3 + y^2 - y - 1$
c_6, c_7, c_{12}	$y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1$
c_8, c_{11}	$y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1$
c_{10}	y^5

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.21774$ $a = -1.99330$ $b = 1.86133$	-4.04602	-17.6010
$u = 0.309916 + 0.549911I$ $a = -0.161754 + 0.941741I$ $b = -0.025747 + 0.535921I$	$-1.97403 - 1.53058I$	$-6.24587 + 6.13700I$
$u = 0.309916 - 0.549911I$ $a = -0.161754 - 0.941741I$ $b = -0.025747 - 0.535921I$	$-1.97403 + 1.53058I$	$-6.24587 - 6.13700I$
$u = -1.41878 + 0.21917I$ $a = 0.229832 + 0.160224I$ $b = -0.047773 + 0.514129I$	$-7.51750 + 4.40083I$	$-11.4232 - 13.5655I$
$u = -1.41878 - 0.21917I$ $a = 0.229832 - 0.160224I$ $b = -0.047773 - 0.514129I$	$-7.51750 - 4.40083I$	$-11.4232 + 13.5655I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^5)(u^{100}-6u^{99}+\cdots+1149u-49)$
c_2	$49(7u^5-30u^4+41u^3-26u^2+8u-1)$ $\cdot(7u^{100}+35u^{99}+\cdots+385706u-40879)$
c_3	$49(7u^5+12u^4+2u^3+7u^2+1)$ $\cdot(7u^{100}-147u^{99}+\cdots-311196u-14099)$
c_4	$((u+1)^5)(u^{100}-6u^{99}+\cdots+1149u-49)$
c_5	$(u^5-u^4+2u^3-u^2+u-1)(u^{100}+2u^{99}+\cdots+5u+1)$
c_6, c_7	$(u^5+u^4-2u^3-u^2+u-1)(u^{100}+2u^{99}+\cdots+u-1)$
c_8	$(u^5-3u^4+4u^3-u^2-u+1)(u^{100}-6u^{99}+\cdots+25745u-4025)$
c_9	$(u^5+u^4+2u^3+u^2+u+1)(u^{100}+2u^{99}+\cdots+5u+1)$
c_{10}	$u^5(u^{100}+3u^{99}+\cdots+17472u+1568)$
c_{11}	$(u^5+3u^4+4u^3+u^2-u-1)(u^{100}-6u^{99}+\cdots+25745u-4025)$
c_{12}	$(u^5-u^4-2u^3+u^2+u+1)(u^{100}+2u^{99}+\cdots+u-1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$((y-1)^5)(y^{100} - 54y^{99} + \cdots - 355685y + 2401)$
c_2	$2401(49y^5 - 326y^4 + 233y^3 - 80y^2 + 12y - 1)$ $\cdot (49y^{100} - 12187y^{99} + \cdots - 36205848648y + 1671092641)$
c_3	$2401(49y^5 - 116y^4 - 164y^3 - 73y^2 - 14y - 1)$ $\cdot (49y^{100} - 14049y^{99} + \cdots - 63467769418y + 198781801)$
c_5, c_9	$(y^5 + 3y^4 + 4y^3 + y^2 - y - 1)(y^{100} - 54y^{99} + \cdots - 7y + 1)$
c_6, c_7, c_{12}	$(y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1)(y^{100} - 82y^{99} + \cdots - 7y + 1)$
c_8, c_{11}	$(y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1)$ $\cdot (y^{100} + 70y^{99} + \cdots - 361276175y + 16200625)$
c_{10}	$y^5(y^{100} - 33y^{99} + \cdots - 2.59084 \times 10^8 y + 2458624)$