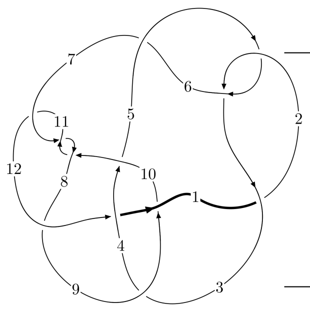
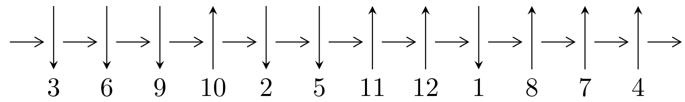
$12a_{0366}$ $(K12a_{0366})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -1.20161 \times 10^{100} u^{98} - 1.07370 \times 10^{101} u^{97} + \cdots + 5.32115 \times 10^{101} b - 4.79500 \times 10^{101},$$
$$4.08591 \times 10^{101} u^{98} - 9.54872 \times 10^{101} u^{97} + \cdots + 5.32115 \times 10^{101} a + 2.76802 \times 10^{102},\ u^{99} - 2u^{98} + \cdots + 10u$$
$$I_2^u = \langle b - u + 1,\ -u^2 + a - 2u - 1,\ u^3 + u^2 + 2u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 102 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. $I_1^u = \langle -1.20 \times 10^{100}u^{98} - 1.07 \times 10^{101}u^{97} + \cdots + 5.32 \times 10^{101}b - 4.80 \times 10^{101},\ 4.09 \times 10^{101}u^{98} - 9.55 \times 10^{101}u^{97} + \cdots + 5.32 \times 10^{101}a + 2.77 \times 10^{102},\ u^{99} - 2u^{98} + \cdots + 10u - 1 \rangle$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -0.767862u^{98} + 1.79449u^{97} + \cdots - 12.3985u - 5.20192 \\ 0.0225817u^{98} + 0.201779u^{97} + \cdots - 1.34732u + 0.901122 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^4 - u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0.861849u^{98} - 1.09544u^{97} + \cdots + 2.79010u + 3.49312 \\ 0.0199269u^{98} + 0.608326u^{97} + \cdots + 4.08418u - 0.841922 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.725424u^{98} + 1.49057u^{97} + \cdots - 16.5479u - 4.17999 \\ 0.00155011u^{98} + 0.0452744u^{97} + \cdots - 2.59505u + 0.978516 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -0.725766u^{98} + 1.41165u^{97} + \cdots - 14.9928u - 4.96501 \\ 0.00320677u^{98} - 0.0365230u^{97} + \cdots - 1.78152u + 0.962855 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.854628u^{98} - 1.62697u^{97} + \cdots - 5.36906u + 6.43646 \\ 0.0502721u^{98} + 0.0347137u^{97} + \cdots + 0.693556u - 0.831628 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.0293994u^{98} + 0.0890561u^{97} + \cdots + 8.63836u - 1.36250 \\ -0.0197781u^{98} + 0.0447446u^{97} + \cdots + 2.48760u + 0.0270043 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.817358u^{98} + 1.60477u^{97} + \cdots + 11.3028u - 8.84250$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{99} + 30u^{98} + \cdots + 11u + 1$
c_2, c_5	$u^{99} + 4u^{98} + \cdots - 3u + 1$
c_3	$u^{99} - 2u^{98} + \cdots - 30950u + 10543$
c_4	$u^{99} + 38u^{97} + \cdots + 2168454u + 308593$
c_7, c_{10}, c_{11}	$u^{99} + 2u^{98} + \cdots + 10u + 1$
c_8	$u^{99} - 2u^{98} + \cdots + 20112u + 7633$
c_9	$u^{99} + 7u^{98} + \cdots - 4u - 8$
c_{12}	$u^{99} + 10u^{98} + \cdots - u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{99} + 82y^{98} + \cdots + 267y - 1$
c_2, c_5	$y^{99} - 30y^{98} + \cdots + 11y - 1$
c_3	$y^{99} + 132y^{98} + \cdots - 3285085678y - 111154849$
c_4	$y^{99} + 76y^{98} + \cdots + 5233821340866y - 95229639649$
c_7, c_{10}, c_{11}	$y^{99} + 84y^{98} + \cdots + 146y - 1$
c_8	$y^{99} - 44y^{98} + \cdots + 8103212674y - 58262689$
c_9	$y^{99} + 21y^{98} + \cdots - 1968y - 64$
c_{12}	$y^{99} - 10y^{98} + \cdots + 11y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.934041 + 0.285611I$ $a = 0.0684546 - 0.1098530I$ $b = 0.760126 - 0.032980I$	$6.44395 - 4.31125I$	0
$u = -0.934041 - 0.285611I$ $a = 0.0684546 + 0.1098530I$ $b = 0.760126 + 0.032980I$	$6.44395 + 4.31125I$	0
$u = -0.945397 + 0.242380I$ $a = -0.0894131 + 0.0864711I$ $b = -0.777045 + 0.023858I$	$6.51992 + 1.59072I$	0
$u = -0.945397 - 0.242380I$ $a = -0.0894131 - 0.0864711I$ $b = -0.777045 - 0.023858I$	$6.51992 - 1.59072I$	0
$u = -0.619852 + 0.849329I$ $a = -0.191895 - 0.725655I$ $b = 0.451994 - 0.354754I$	$4.65474 - 1.02924I$	0
$u = -0.619852 - 0.849329I$ $a = -0.191895 + 0.725655I$ $b = 0.451994 + 0.354754I$	$4.65474 + 1.02924I$	0
$u = 0.489624 + 0.976166I$ $a = 1.11011 + 1.17258I$ $b = 0.862929 - 0.009132I$	$5.00008 - 8.91845I$	0
$u = 0.489624 - 0.976166I$ $a = 1.11011 - 1.17258I$ $b = 0.862929 + 0.009132I$	$5.00008 + 8.91845I$	0
$u = -0.607360 + 0.910741I$ $a = 0.158283 + 0.794060I$ $b = -0.453491 + 0.410887I$	$4.43226 - 6.94743I$	0
$u = -0.607360 - 0.910741I$ $a = 0.158283 - 0.794060I$ $b = -0.453491 - 0.410887I$	$4.43226 + 6.94743I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.465505 + 1.006420I$ $a = -1.13331 - 1.17177I$ $b = -0.868308 - 0.003082I$	$5.66290 - 2.75362I$	0
$u = 0.465505 - 1.006420I$ $a = -1.13331 + 1.17177I$ $b = -0.868308 + 0.003082I$	$5.66290 + 2.75362I$	0
$u = -0.295504 + 1.081280I$ $a = 0.274270 + 1.370950I$ $b = -0.157652 + 0.819914I$	$-1.54134 - 4.00958I$	0
$u = -0.295504 - 1.081280I$ $a = 0.274270 - 1.370950I$ $b = -0.157652 - 0.819914I$	$-1.54134 + 4.00958I$	0
$u = 0.848820 + 0.223053I$ $a = 0.1302910 - 0.0495279I$ $b = 1.63335 + 0.71600I$	$7.3252 + 13.6606I$	$0. - 8.92570I$
$u = 0.848820 - 0.223053I$ $a = 0.1302910 + 0.0495279I$ $b = 1.63335 - 0.71600I$	$7.3252 - 13.6606I$	$0. + 8.92570I$
$u = 0.307610 + 0.818157I$ $a = 1.08566 + 1.28137I$ $b = 0.697402 + 0.013200I$	$-1.99276 - 4.20196I$	0
$u = 0.307610 - 0.818157I$ $a = 1.08566 - 1.28137I$ $b = 0.697402 - 0.013200I$	$-1.99276 + 4.20196I$	0
$u = 0.844705 + 0.201410I$ $a = -0.113791 + 0.098540I$ $b = -1.62516 - 0.71635I$	$8.14139 + 7.42066I$	$5.24860 - 4.23174I$
$u = 0.844705 - 0.201410I$ $a = -0.113791 - 0.098540I$ $b = -1.62516 + 0.71635I$	$8.14139 - 7.42066I$	$5.24860 + 4.23174I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.248263 + 1.118570I$ $a = -1.32465 - 1.35187I$ $b = -1.028980 - 0.184164I$	$0.608522 - 0.603280I$	0
$u = 0.248263 - 1.118570I$ $a = -1.32465 + 1.35187I$ $b = -1.028980 + 0.184164I$	$0.608522 + 0.603280I$	0
$u = 0.752592 + 0.215634I$ $a = -0.1157960 - 0.0197121I$ $b = 1.63356 + 0.74026I$	$0.05606 + 8.13743I$	$-0.09558 - 8.89965I$
$u = 0.752592 - 0.215634I$ $a = -0.1157960 + 0.0197121I$ $b = 1.63356 - 0.74026I$	$0.05606 - 8.13743I$	$-0.09558 + 8.89965I$
$u = 0.268779 + 1.199880I$ $a = 0.24849 + 1.92674I$ $b = 1.48419 + 1.59594I$	$3.35814 - 2.05345I$	0
$u = 0.268779 - 1.199880I$ $a = 0.24849 - 1.92674I$ $b = 1.48419 - 1.59594I$	$3.35814 + 2.05345I$	0
$u = 0.745362 + 0.134461I$ $a = 0.175401 + 0.260812I$ $b = -1.61882 - 0.76689I$	$3.52295 + 4.31748I$	$6.92910 - 5.56695I$
$u = 0.745362 - 0.134461I$ $a = 0.175401 - 0.260812I$ $b = -1.61882 + 0.76689I$	$3.52295 - 4.31748I$	$6.92910 + 5.56695I$
$u = -0.678642 + 0.330251I$ $a = -0.206249 - 0.013125I$ $b = 0.615264 + 0.077383I$	$1.02146 - 1.90927I$	$5.91964 + 9.92466I$
$u = -0.678642 - 0.330251I$ $a = -0.206249 + 0.013125I$ $b = 0.615264 - 0.077383I$	$1.02146 + 1.90927I$	$5.91964 - 9.92466I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.754120$ $a=-0.187188$ $b=-0.890755$	1.70898	8.74420
$u=-0.029724+1.250120I$ $a=\ 0.98004+2.06746I$ $b=\ 0.97006+1.27890I$	$-1.32263-4.42952I$	0
$u=-0.029724-1.250120I$ $a=\ 0.98004-2.06746I$ $b=\ 0.97006-1.27890I$	$-1.32263+4.42952I$	0
$u=\ 0.745953+0.036112I$ $a=\ 0.006297-0.821786I$ $b=-1.42040+0.84753I$	$7.64308-0.65029I$	$9.33071+0.18867I$
$u=\ 0.745953-0.036112I$ $a=\ 0.006297+0.821786I$ $b=-1.42040-0.84753I$	$7.64308+0.65029I$	$9.33071-0.18867I$
$u=\ 0.732406+0.078855I$ $a=\ 0.062991+0.954918I$ $b=\ 1.33124-0.85513I$	$6.74172+5.69863I$	$7.43474-6.11480I$
$u=\ 0.732406-0.078855I$ $a=\ 0.062991-0.954918I$ $b=\ 1.33124+0.85513I$	$6.74172-5.69863I$	$7.43474+6.11480I$
$u=-0.734635$ $a=-0.210505$ $b=-0.911518$	1.70946	7.92140
$u=\ 0.295125+1.232170I$ $a=-0.35967-2.03807I$ $b=-1.59104-1.63787I$	$3.97750+4.41856I$	0
$u=\ 0.295125-1.232170I$ $a=-0.35967+2.03807I$ $b=-1.59104+1.63787I$	$3.97750-4.41856I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.217724 + 1.257540I$ $a = 1.92175 + 1.50783I$ $b = 1.68088 + 0.04262I$	$-4.15077 + 2.23479I$	0
$u = 0.217724 - 1.257540I$ $a = 1.92175 - 1.50783I$ $b = 1.68088 - 0.04262I$	$-4.15077 - 2.23479I$	0
$u = -0.119234 + 1.301930I$ $a = -0.82700 - 2.40146I$ $b = -0.86265 - 1.81488I$	$-1.130880 + 0.549874I$	0
$u = -0.119234 - 1.301930I$ $a = -0.82700 + 2.40146I$ $b = -0.86265 + 1.81488I$	$-1.130880 - 0.549874I$	0
$u = -0.252218 + 1.284100I$ $a = 1.73380 + 2.17731I$ $b = 2.07810 + 1.91250I$	$0.531022 - 0.352290I$	0
$u = -0.252218 - 1.284100I$ $a = 1.73380 - 2.17731I$ $b = 2.07810 - 1.91250I$	$0.531022 + 0.352290I$	0
$u = 0.312678 + 1.284840I$ $a = -1.56503 - 0.86630I$ $b = -1.052390 + 0.317344I$	$3.53108 + 3.17609I$	0
$u = 0.312678 - 1.284840I$ $a = -1.56503 + 0.86630I$ $b = -1.052390 - 0.317344I$	$3.53108 - 3.17609I$	0
$u = -0.254772 + 1.300720I$ $a = -1.73085 - 2.36656I$ $b = -2.04108 - 2.08187I$	$0.37869 - 6.12549I$	0
$u = -0.254772 - 1.300720I$ $a = -1.73085 + 2.36656I$ $b = -2.04108 + 2.08187I$	$0.37869 + 6.12549I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.175162 + 1.316190I$ $a = 1.62898 + 0.27564I$ $b = 2.07408 + 0.32600I$	$-4.07709 - 2.24905I$	0
$u = -0.175162 - 1.316190I$ $a = 1.62898 - 0.27564I$ $b = 2.07408 - 0.32600I$	$-4.07709 + 2.24905I$	0
$u = -0.210759 + 1.318290I$ $a = -1.31219 - 3.45789I$ $b = -1.41862 - 3.15690I$	$-4.33937 - 2.97560I$	0
$u = -0.210759 - 1.318290I$ $a = -1.31219 + 3.45789I$ $b = -1.41862 + 3.15690I$	$-4.33937 + 2.97560I$	0
$u = -0.279170 + 1.313540I$ $a = -0.72178 + 1.46138I$ $b = -1.05622 + 1.14287I$	$-2.50644 - 3.56316I$	0
$u = -0.279170 - 1.313540I$ $a = -0.72178 - 1.46138I$ $b = -1.05622 - 1.14287I$	$-2.50644 + 3.56316I$	0
$u = 0.012646 + 1.346570I$ $a = 0.111304 + 0.574163I$ $b = 0.910249 + 0.778259I$	$-5.09149 - 1.65450I$	0
$u = 0.012646 - 1.346570I$ $a = 0.111304 - 0.574163I$ $b = 0.910249 - 0.778259I$	$-5.09149 + 1.65450I$	0
$u = 0.306416 + 1.314380I$ $a = 1.56544 + 0.71108I$ $b = 0.975960 - 0.437826I$	$2.37552 + 9.45911I$	0
$u = 0.306416 - 1.314380I$ $a = 1.56544 - 0.71108I$ $b = 0.975960 + 0.437826I$	$2.37552 - 9.45911I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.639595 + 0.091648I$ $a = -0.632784 - 0.391435I$ $b = 1.74029 + 0.82376I$	$-0.579400 + 0.781243I$	$3.90058 - 9.11901I$
$u = 0.639595 - 0.091648I$ $a = -0.632784 + 0.391435I$ $b = 1.74029 - 0.82376I$	$-0.579400 - 0.781243I$	$3.90058 + 9.11901I$
$u = -0.643484 + 0.012521I$ $a = 0.00320 - 2.60568I$ $b = 0.01890 - 1.95574I$	$4.51074 - 2.88147I$	$-21.2227 - 0.3778I$
$u = -0.643484 - 0.012521I$ $a = 0.00320 + 2.60568I$ $b = 0.01890 + 1.95574I$	$4.51074 + 2.88147I$	$-21.2227 + 0.3778I$
$u = 0.267449 + 1.332400I$ $a = 0.76039 + 2.51755I$ $b = 1.93430 + 1.74894I$	$-5.08797 + 4.10505I$	0
$u = 0.267449 - 1.332400I$ $a = 0.76039 - 2.51755I$ $b = 1.93430 - 1.74894I$	$-5.08797 - 4.10505I$	0
$u = 0.100202 + 1.368080I$ $a = 0.422862 - 0.568821I$ $b = -0.508707 - 0.941569I$	$-7.19579 + 2.54584I$	0
$u = 0.100202 - 1.368080I$ $a = 0.422862 + 0.568821I$ $b = -0.508707 + 0.941569I$	$-7.19579 - 2.54584I$	0
$u = 0.313104 + 1.345580I$ $a = -0.80767 - 2.26450I$ $b = -1.86910 - 1.64443I$	$-1.14017 + 8.15162I$	0
$u = 0.313104 - 1.345580I$ $a = -0.80767 + 2.26450I$ $b = -1.86910 + 1.64443I$	$-1.14017 - 8.15162I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.31190 + 1.38433I$ $a = 0.94240 + 2.25156I$ $b = 1.90592 + 1.61257I$	$-5.01093 + 11.99980I$	0
$u = 0.31190 - 1.38433I$ $a = 0.94240 - 2.25156I$ $b = 1.90592 - 1.61257I$	$-5.01093 - 11.99980I$	0
$u = 0.35666 + 1.39025I$ $a = -0.94316 - 2.12935I$ $b = -1.89156 - 1.57991I$	$3.10562 + 11.74730I$	0
$u = 0.35666 - 1.39025I$ $a = -0.94316 + 2.12935I$ $b = -1.89156 + 1.57991I$	$3.10562 - 11.74730I$	0
$u = -0.29273 + 1.41546I$ $a = 0.598510 - 0.901346I$ $b = 1.022280 - 0.601144I$	$-4.51107 - 5.52495I$	0
$u = -0.29273 - 1.41546I$ $a = 0.598510 + 0.901346I$ $b = 1.022280 + 0.601144I$	$-4.51107 + 5.52495I$	0
$u = 0.35549 + 1.40235I$ $a = 0.97197 + 2.13112I$ $b = 1.90018 + 1.57876I$	$2.1737 + 18.0005I$	0
$u = 0.35549 - 1.40235I$ $a = 0.97197 - 2.13112I$ $b = 1.90018 - 1.57876I$	$2.1737 - 18.0005I$	0
$u = 0.01411 + 1.45261I$ $a = 0.0415086 - 0.0671082I$ $b = -0.648120 - 0.419340I$	$-9.08717 - 3.64401I$	0
$u = 0.01411 - 1.45261I$ $a = 0.0415086 + 0.0671082I$ $b = -0.648120 + 0.419340I$	$-9.08717 + 3.64401I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.41281 + 1.39428I$ $a = -0.353629 + 1.025430I$ $b = -0.780953 + 0.685090I$	$1.40209 - 3.28258I$	0
$u = -0.41281 - 1.39428I$ $a = -0.353629 - 1.025430I$ $b = -0.780953 - 0.685090I$	$1.40209 + 3.28258I$	0
$u = -0.539905 + 0.036302I$ $a = 0.18420 - 2.19342I$ $b = 0.51211 - 1.59858I$	$-0.042633 - 0.232655I$	$10.7442 - 23.3936I$
$u = -0.539905 - 0.036302I$ $a = 0.18420 + 2.19342I$ $b = 0.51211 + 1.59858I$	$-0.042633 + 0.232655I$	$10.7442 + 23.3936I$
$u = -0.40181 + 1.42168I$ $a = 0.369896 - 0.987293I$ $b = 0.799484 - 0.652468I$	$1.07967 - 9.12556I$	0
$u = -0.40181 - 1.42168I$ $a = 0.369896 + 0.987293I$ $b = 0.799484 + 0.652468I$	$1.07967 + 9.12556I$	0
$u = -0.210869 + 0.468245I$ $a = -1.222040 - 0.575137I$ $b = 0.0312675 + 0.1076690I$	$0.285321 - 1.318120I$	$2.90889 + 4.59506I$
$u = -0.210869 - 0.468245I$ $a = -1.222040 + 0.575137I$ $b = 0.0312675 - 0.1076690I$	$0.285321 + 1.318120I$	$2.90889 - 4.59506I$
$u = -0.09631 + 1.49246I$ $a = 0.267685 - 0.258901I$ $b = 0.830980 + 0.055252I$	$-3.12706 - 3.06200I$	0
$u = -0.09631 - 1.49246I$ $a = 0.267685 + 0.258901I$ $b = 0.830980 - 0.055252I$	$-3.12706 + 3.06200I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.06607 + 1.51563I$ $a = -0.141415 + 0.260153I$ $b = -0.717322 - 0.084721I$	$-3.77910 - 8.70926I$	0
$u = -0.06607 - 1.51563I$ $a = -0.141415 - 0.260153I$ $b = -0.717322 + 0.084721I$	$-3.77910 + 8.70926I$	0
$u = 0.288880 + 0.303356I$ $a = 1.07664 + 1.84967I$ $b = 0.397565 - 0.485927I$	$-1.93584 + 1.10574I$	$-7.09590 - 4.12415I$
$u = 0.288880 - 0.303356I$ $a = 1.07664 - 1.84967I$ $b = 0.397565 + 0.485927I$	$-1.93584 - 1.10574I$	$-7.09590 + 4.12415I$
$u = -0.279337 + 0.254385I$ $a = -0.34087 - 2.71226I$ $b = -0.421041 - 1.088310I$	$3.48145 + 1.96482I$	$0.72295 - 5.55641I$
$u = -0.279337 - 0.254385I$ $a = -0.34087 + 2.71226I$ $b = -0.421041 + 1.088310I$	$3.48145 - 1.96482I$	$0.72295 + 5.55641I$
$u = -0.193377 + 0.308991I$ $a = 0.09455 + 2.77073I$ $b = 0.594927 + 1.021300I$	$3.23875 - 3.76538I$	$-0.297980 + 0.686872I$
$u = -0.193377 - 0.308991I$ $a = 0.09455 - 2.77073I$ $b = 0.594927 - 1.021300I$	$3.23875 + 3.76538I$	$-0.297980 - 0.686872I$
$u = 0.0826245$ $a = -6.32671$ $b = 0.724417$	-1.43820	-7.18500

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 5u^2 + 4u + 4$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_5 c_6, c_{12}	$(y-1)^3$
c_3, c_4, c_8	$y^3 - y^2 + 2y - 1$
c_7, c_{10}, c_{11}	$y^3 + 3y^2 + 2y - 1$
c_9	y^3

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.215080 + 1.307140I$ $a = -1.09252 + 2.05200I$ $b = -1.21508 + 1.30714I$	$-4.66906 - 2.82812I$	$-5.17211 + 2.41717I$
$u = -0.215080 - 1.307140I$ $a = -1.09252 - 2.05200I$ $b = -1.21508 - 1.30714I$	$-4.66906 + 2.82812I$	$-5.17211 - 2.41717I$
$u = -0.569840$ $a = 0.185037$ $b = -1.56984$	-0.531480	3.34420

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^3)(u^{99}+30u^{98}+\cdots+11u+1)$
c_2	$((u-1)^3)(u^{99}+4u^{98}+\cdots-3u+1)$
c_3	$(u^3+u^2-1)(u^{99}-2u^{98}+\cdots-30950u+10543)$
c_4	$(u^3+u^2-1)(u^{99}+38u^{97}+\cdots+2168454u+308593)$
c_5	$((u+1)^3)(u^{99}+4u^{98}+\cdots-3u+1)$
c_6	$((u+1)^3)(u^{99}+30u^{98}+\cdots+11u+1)$
c_7	$(u^3+u^2+2u+1)(u^{99}+2u^{98}+\cdots+10u+1)$
c_8	$(u^3-u^2+1)(u^{99}-2u^{98}+\cdots+20112u+7633)$
c_9	$u^3(u^{99}+7u^{98}+\cdots-4u-8)$
c_{10}, c_{11}	$(u^3-u^2+2u-1)(u^{99}+2u^{98}+\cdots+10u+1)$
c_{12}	$((u-1)^3)(u^{99}+10u^{98}+\cdots-u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$((y-1)^3)(y^{99}+82y^{98}+\cdots+267y-1)$
c_2, c_5	$((y-1)^3)(y^{99}-30y^{98}+\cdots+11y-1)$
c_3	$(y^3-y^2+2y-1)(y^{99}+132y^{98}+\cdots-3.28509\times10^9y-1.11155\times10^8)$
c_4	(y^3-y^2+2y-1) $\cdot(y^{99}+76y^{98}+\cdots+5233821340866y-95229639649)$
c_7, c_{10}, c_{11}	$(y^3+3y^2+2y-1)(y^{99}+84y^{98}+\cdots+146y-1)$
c_8	$(y^3-y^2+2y-1)(y^{99}-44y^{98}+\cdots+8.10321\times10^9y-5.82627\times10^7)$
c_9	$y^3(y^{99}+21y^{98}+\cdots-1968y-64)$
c_{12}	$((y-1)^3)(y^{99}-10y^{98}+\cdots+11y-1)$