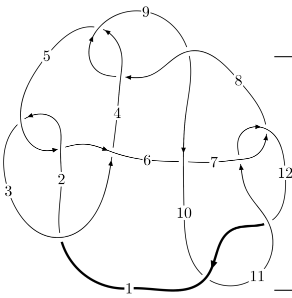
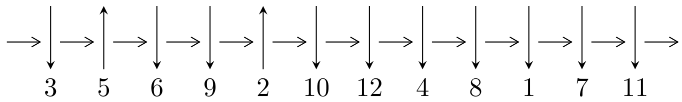
$12a_{0021}$ ($K12a_{0021}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -19u^{103} - 49u^{102} + \cdots + 2b + 19,\ -2u^{103} + 5u^{102} + \cdots + 2a - 6,\ u^{104} + 3u^{103} + \cdots - u - 1\rangle$$
$$I_2^u = \langle -u^2a + b + a,\ u^2a + a^2 - au - u + 1,\ u^3 - u^2 + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 110 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. $\boldsymbol{I_1^u = \langle -19u^{103} - 49u^{102} + \cdots + 2b + 19,\ -2u^{103} + 5u^{102} + \cdots + 2a - 6,\ u^{104} + 3u^{103} + \cdots - u - 1\rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^{103} - \frac{5}{2}u^{102} + \cdots - \frac{1}{2}u + 3 \\ \frac{19}{2}u^{103} + \frac{49}{2}u^{102} + \cdots - 4u - \frac{19}{2} \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^8 + u^6 - u^4 + 1 \\ -u^{10} + 2u^8 - 3u^6 + 2u^4 - u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -2u^{103} - \frac{23}{2}u^{102} + \cdots + \frac{1}{2}u + 7 \\ \frac{23}{2}u^{103} + \frac{57}{2}u^{102} + \cdots - 5u - \frac{23}{2} \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^4 - u^2 + 1 \\ -u^4 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^9 - 2u^7 + 3u^5 - 2u^3 + u \\ -u^9 + u^7 - u^5 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -5u^{102} - \frac{13}{2}u^{101} + \cdots - \frac{1}{2}u + \frac{9}{2} \\ 9u^{103} + 23u^{102} + \cdots - 3u - 9 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^{102} - \frac{3}{2}u^{101} + \cdots + \frac{7}{2}u + \frac{5}{2} \\ u^{103} + 3u^{102} + \cdots - u - 1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{33}{2}u^{103} + 31u^{102} + \cdots - \frac{1}{2}u - \frac{33}{2}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{104} + 48u^{103} + \cdots - 24u + 1$
c_2, c_5	$u^{104} + 4u^{103} + \cdots + 8u + 1$
c_3	$u^{104} - 4u^{103} + \cdots - 644u + 193$
c_4, c_8	$u^{104} - u^{103} + \cdots - 96u - 64$
c_6	$u^{104} - 3u^{103} + \cdots + 14175u - 2425$
c_7, c_{11}	$u^{104} + 3u^{103} + \cdots - u - 1$
c_9	$u^{104} + 35u^{103} + \cdots + 82944u + 4096$
c_{10}, c_{12}	$u^{104} + 33u^{103} + \cdots + 11u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{104} + 20y^{103} + \cdots - 556y + 1$
c_2, c_5	$y^{104} + 48y^{103} + \cdots - 24y + 1$
c_3	$y^{104} - 8y^{103} + \cdots - 3334440y + 37249$
c_4, c_8	$y^{104} - 35y^{103} + \cdots - 82944y + 4096$
c_6	$y^{104} + 19y^{103} + \cdots + 127099125y + 5880625$
c_7, c_{11}	$y^{104} - 33y^{103} + \cdots - 11y + 1$
c_9	$y^{104} + 57y^{103} + \cdots - 571473920y + 16777216$
c_{10}, c_{12}	$y^{104} + 79y^{103} + \cdots + 285y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.995545 + 0.161097I$ $a = -0.512579 - 0.871788I$ $b = -0.644479 - 0.792496I$	$-1.83155 + 5.70406I$	0
$u = -0.995545 - 0.161097I$ $a = -0.512579 + 0.871788I$ $b = -0.644479 + 0.792496I$	$-1.83155 - 5.70406I$	0
$u = 0.970059 + 0.180479I$ $a = 0.99729 - 1.32904I$ $b = -0.558830 + 0.049258I$	$-0.10724 - 3.95678I$	0
$u = 0.970059 - 0.180479I$ $a = 0.99729 + 1.32904I$ $b = -0.558830 - 0.049258I$	$-0.10724 + 3.95678I$	0
$u = -0.923833 + 0.339721I$ $a = 0.616132 + 0.482403I$ $b = 0.806426 + 0.318937I$	$-0.284227 - 0.543049I$	0
$u = -0.923833 - 0.339721I$ $a = 0.616132 - 0.482403I$ $b = 0.806426 - 0.318937I$	$-0.284227 + 0.543049I$	0
$u = 0.827173 + 0.596410I$ $a = -0.79732 + 1.46815I$ $b = -0.261002 - 1.178970I$	$-0.064833 + 0.905297I$	0
$u = 0.827173 - 0.596410I$ $a = -0.79732 - 1.46815I$ $b = -0.261002 + 1.178970I$	$-0.064833 - 0.905297I$	0
$u = 1.02711$ $a = -0.774739$ $b = 1.02521$	-5.59162	0
$u = -0.953515 + 0.186747I$ $a = 0.516727 + 0.739793I$ $b = 0.632602 + 0.622967I$	$0.020107 + 1.034370I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.953515 - 0.186747I$ $a = 0.516727 - 0.739793I$ $b = 0.632602 - 0.622967I$	$0.020107 - 1.034370I$	0
$u = -0.963413 + 0.068510I$ $a = -0.217097 - 0.862505I$ $b = -0.268461 - 0.816848I$	$-3.56083 - 0.88582I$	0
$u = -0.963413 - 0.068510I$ $a = -0.217097 + 0.862505I$ $b = -0.268461 + 0.816848I$	$-3.56083 + 0.88582I$	0
$u = -0.972667 + 0.372254I$ $a = -0.705354 - 0.386489I$ $b = -0.874004 - 0.283310I$	$-2.41063 - 5.32876I$	0
$u = -0.972667 - 0.372254I$ $a = -0.705354 + 0.386489I$ $b = -0.874004 + 0.283310I$	$-2.41063 + 5.32876I$	0
$u = -0.929413 + 0.472446I$ $a = -0.399519 - 0.237173I$ $b = -0.832935 - 0.303200I$	$-4.34073 + 1.98932I$	0
$u = -0.929413 - 0.472446I$ $a = -0.399519 + 0.237173I$ $b = -0.832935 + 0.303200I$	$-4.34073 - 1.98932I$	0
$u = 1.044070 + 0.145718I$ $a = -0.609037 + 1.077920I$ $b = 0.727801 + 0.244738I$	$-6.19328 - 3.93028I$	0
$u = 1.044070 - 0.145718I$ $a = -0.609037 - 1.077920I$ $b = 0.727801 - 0.244738I$	$-6.19328 + 3.93028I$	0
$u = 1.040560 + 0.185605I$ $a = 0.63194 - 1.31168I$ $b = -0.542661 - 0.263709I$	$-1.35514 - 6.47708I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.040560 - 0.185605I$ $a = 0.63194 + 1.31168I$ $b = -0.542661 + 0.263709I$	$-1.35514 + 6.47708I$	0
$u = 1.058190 + 0.027517I$ $a = 0.523585 - 0.218830I$ $b = -1.070460 - 0.065154I$	$-8.85013 - 3.97317I$	0
$u = 1.058190 - 0.027517I$ $a = 0.523585 + 0.218830I$ $b = -1.070460 + 0.065154I$	$-8.85013 + 3.97317I$	0
$u = 0.754441 + 0.751915I$ $a = 0.14946 - 1.60978I$ $b = 0.80789 + 1.57405I$	$1.81411 - 1.60183I$	0
$u = 0.754441 - 0.751915I$ $a = 0.14946 + 1.60978I$ $b = 0.80789 - 1.57405I$	$1.81411 + 1.60183I$	0
$u = -0.696471 + 0.811179I$ $a = 1.72568 + 1.53879I$ $b = -0.10925 - 2.61448I$	$0.25197 - 3.78803I$	0
$u = -0.696471 - 0.811179I$ $a = 1.72568 - 1.53879I$ $b = -0.10925 + 2.61448I$	$0.25197 + 3.78803I$	0
$u = 0.917559 + 0.150661I$ $a = -1.33133 + 1.31447I$ $b = 0.699472 - 0.238599I$	$-1.12265 + 1.04672I$	0
$u = 0.917559 - 0.150661I$ $a = -1.33133 - 1.31447I$ $b = 0.699472 + 0.238599I$	$-1.12265 - 1.04672I$	0
$u = -0.845342 + 0.657177I$ $a = -0.60933 + 1.32456I$ $b = 2.39972 + 0.27164I$	$1.80047 + 0.06644I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.845342-0.657177I$ $a=-0.60933-1.32456I$ $b=\ \ 2.39972-0.27164I$	$1.80047-0.06644I$	0
$u=\ \ 1.059270+0.187963I$ $a=-0.52976+1.33230I$ $b=\ \ 0.543826+0.360359I$	$-3.56774-11.61460I$	0
$u=\ \ 1.059270-0.187963I$ $a=-0.52976-1.33230I$ $b=\ \ 0.543826-0.360359I$	$-3.56774+11.61460I$	0
$u=\ \ 0.724424+0.808314I$ $a=\ \ 0.06007-1.91766I$ $b=\ \ 1.10628+2.12037I$	$4.56534+5.10375I$	0
$u=\ \ 0.724424-0.808314I$ $a=\ \ 0.06007+1.91766I$ $b=\ \ 1.10628-2.12037I$	$4.56534-5.10375I$	0
$u=-0.580019+0.700208I$ $a=-1.098130-0.872380I$ $b=-0.018720+0.778011I$	$-3.49153-4.75928I$	0
$u=-0.580019-0.700208I$ $a=-1.098130+0.872380I$ $b=-0.018720-0.778011I$	$-3.49153+4.75928I$	0
$u=-0.749031+0.797955I$ $a=\ \ 1.63183+2.03735I$ $b=\ \ 0.75933-3.15840I$	$5.02616+2.15983I$	0
$u=-0.749031-0.797955I$ $a=\ \ 1.63183-2.03735I$ $b=\ \ 0.75933+3.15840I$	$5.02616-2.15983I$	0
$u=-0.736317+0.810407I$ $a=-1.75080-1.89744I$ $b=-0.39215+3.15606I$	$6.34017-3.11840I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.736317 - 0.810407I$ $a = -1.75080 + 1.89744I$ $b = -0.39215 - 3.15606I$	$6.34017 + 3.11840I$	0
$u = -0.712069 + 0.832469I$ $a = -1.92411 - 1.64609I$ $b = 0.23828 + 3.07167I$	$5.42558 - 6.12943I$	0
$u = -0.712069 - 0.832469I$ $a = -1.92411 + 1.64609I$ $b = 0.23828 - 3.07167I$	$5.42558 + 6.12943I$	0
$u = -0.705084 + 0.840871I$ $a = 1.98457 + 1.57228I$ $b = -0.44329 - 3.05691I$	$3.32150 - 11.40490I$	0
$u = -0.705084 - 0.840871I$ $a = 1.98457 - 1.57228I$ $b = -0.44329 + 3.05691I$	$3.32150 + 11.40490I$	0
$u = 0.863688 + 0.677581I$ $a = 0.706681 - 1.039710I$ $b = 0.260899 + 1.104450I$	$2.19668 - 2.61840I$	0
$u = 0.863688 - 0.677581I$ $a = 0.706681 + 1.039710I$ $b = 0.260899 - 1.104450I$	$2.19668 + 2.61840I$	0
$u = 0.742286 + 0.808762I$ $a = 0.02357 + 1.86766I$ $b = -1.23942 - 1.96405I$	$6.44605 + 0.06854I$	0
$u = 0.742286 - 0.808762I$ $a = 0.02357 - 1.86766I$ $b = -1.23942 + 1.96405I$	$6.44605 - 0.06854I$	0
$u = -0.886276 + 0.662580I$ $a = 1.19777 - 0.80402I$ $b = -2.29133 - 1.30899I$	$1.66908 + 5.06000I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.886276-0.662580I$ $a=\ \ 1.19777+0.80402I$ $b=-2.29133+1.30899I$	$1.66908-5.06000I$	0
$u=\ \ 0.919787+0.634859I$ $a=-1.14826+1.18703I$ $b=-0.297211-1.298160I$	$-0.40958-5.76100I$	0
$u=\ \ 0.919787-0.634859I$ $a=-1.14826-1.18703I$ $b=-0.297211+1.298160I$	$-0.40958+5.76100I$	0
$u=-0.628192+0.614774I$ $a=\ \ 0.802455+0.921266I$ $b=\ \ 0.543250-0.575702I$	$-0.763936-0.604697I$	0
$u=-0.628192-0.614774I$ $a=\ \ 0.802455-0.921266I$ $b=\ \ 0.543250+0.575702I$	$-0.763936+0.604697I$	0
$u=\ \ 0.780695+0.820092I$ $a=\ \ 0.27330+1.78142I$ $b=-1.61646-1.61478I$	$6.65697-2.35527I$	0
$u=\ \ 0.780695-0.820092I$ $a=\ \ 0.27330-1.78142I$ $b=-1.61646+1.61478I$	$6.65697+2.35527I$	0
$u=\ \ 0.795951+0.829057I$ $a=-0.41309-1.76927I$ $b=\ \ 1.83155+1.46562I$	$4.94995-7.32695I$	0
$u=\ \ 0.795951-0.829057I$ $a=-0.41309+1.76927I$ $b=\ \ 1.83155-1.46562I$	$4.94995+7.32695I$	0
$u=\ \ 0.852838+0.784493I$ $a=-0.518582-1.043630I$ $b=\ \ 1.299520+0.425878I$	$2.51710-1.46458I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.852838 - 0.784493I$ $a = -0.518582 + 1.043630I$ $b = 1.299520 - 0.425878I$	$2.51710 + 1.46458I$	0
$u = -0.987793 + 0.609954I$ $a = -0.282065 - 0.575521I$ $b = 0.324092 + 1.057970I$	$-5.36885 + 2.02799I$	0
$u = -0.987793 - 0.609954I$ $a = -0.282065 + 0.575521I$ $b = 0.324092 - 1.057970I$	$-5.36885 - 2.02799I$	0
$u = -0.977994 + 0.645453I$ $a = 0.727268 + 0.700582I$ $b = -0.32712 - 1.62271I$	$-1.73240 + 5.61848I$	0
$u = -0.977994 - 0.645453I$ $a = 0.727268 - 0.700582I$ $b = -0.32712 + 1.62271I$	$-1.73240 - 5.61848I$	0
$u = 0.903916 + 0.776679I$ $a = 1.058770 + 0.461633I$ $b = -1.179650 + 0.645136I$	$2.36486 - 4.40594I$	0
$u = 0.903916 - 0.776679I$ $a = 1.058770 - 0.461633I$ $b = -1.179650 - 0.645136I$	$2.36486 + 4.40594I$	0
$u = -1.004180 + 0.651392I$ $a = -0.581678 - 1.044430I$ $b = -0.15909 + 1.56067I$	$-4.68776 + 9.95104I$	0
$u = -1.004180 - 0.651392I$ $a = -0.581678 + 1.044430I$ $b = -0.15909 - 1.56067I$	$-4.68776 - 9.95104I$	0
$u = 0.966141 + 0.711656I$ $a = 1.60909 - 0.60969I$ $b = -0.20766 + 1.74080I$	$1.16387 - 3.97141I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.966141 - 0.711656I$ $a = 1.60909 + 0.60969I$ $b = -0.20766 - 1.74080I$	$1.16387 + 3.97141I$	0
$u = -0.977928 + 0.735033I$ $a = 1.85603 + 1.77296I$ $b = 0.58235 - 3.71912I$	$4.32467 + 3.61431I$	0
$u = -0.977928 - 0.735033I$ $a = 1.85603 - 1.77296I$ $b = 0.58235 + 3.71912I$	$4.32467 - 3.61431I$	0
$u = -0.463429 + 0.618913I$ $a = -0.886522 - 0.630657I$ $b = -0.149445 + 0.130543I$	$-4.04796 + 2.71125I$	$-12.61990 - 3.98241I$
$u = -0.463429 - 0.618913I$ $a = -0.886522 + 0.630657I$ $b = -0.149445 - 0.130543I$	$-4.04796 - 2.71125I$	$-12.61990 + 3.98241I$
$u = 0.966506 + 0.761778I$ $a = -1.80162 + 0.05991I$ $b = 0.94812 - 1.84887I$	$6.08454 - 3.56908I$	0
$u = 0.966506 - 0.761778I$ $a = -1.80162 - 0.05991I$ $b = 0.94812 + 1.84887I$	$6.08454 + 3.56908I$	0
$u = 0.985337 + 0.739108I$ $a = -1.90868 + 0.39757I$ $b = 0.51937 - 2.08817I$	$5.70138 - 5.88628I$	0
$u = 0.985337 - 0.739108I$ $a = -1.90868 - 0.39757I$ $b = 0.51937 + 2.08817I$	$5.70138 + 5.88628I$	0
$u = -0.989286 + 0.737835I$ $a = -1.70215 - 1.92426I$ $b = -0.90767 + 3.58230I$	$5.56561 + 8.93649I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.989286 - 0.737835I$ $a = -1.70215 + 1.92426I$ $b = -0.90767 - 3.58230I$	$5.56561 - 8.93649I$	0
$u = 0.960435 + 0.775381I$ $a = 1.79571 + 0.13146I$ $b = -1.20786 + 1.76111I$	$4.44270 + 1.33279I$	0
$u = 0.960435 - 0.775381I$ $a = 1.79571 - 0.13146I$ $b = -1.20786 - 1.76111I$	$4.44270 - 1.33279I$	0
$u = 0.994976 + 0.732633I$ $a = 1.97881 - 0.50784I$ $b = -0.37833 + 2.20105I$	$3.73893 - 10.89850I$	0
$u = 0.994976 - 0.732633I$ $a = 1.97881 + 0.50784I$ $b = -0.37833 - 2.20105I$	$3.73893 + 10.89850I$	0
$u = -1.009160 + 0.724746I$ $a = 1.29694 + 1.92384I$ $b = 1.13741 - 2.95407I$	$-0.69811 + 9.56220I$	0
$u = -1.009160 - 0.724746I$ $a = 1.29694 - 1.92384I$ $b = 1.13741 + 2.95407I$	$-0.69811 - 9.56220I$	0
$u = -1.010060 + 0.739826I$ $a = -1.42104 - 2.13601I$ $b = -1.40773 + 3.26557I$	$4.51266 + 12.01460I$	0
$u = -1.010060 - 0.739826I$ $a = -1.42104 + 2.13601I$ $b = -1.40773 - 3.26557I$	$4.51266 - 12.01460I$	0
$u = -1.016650 + 0.740942I$ $a = 1.34178 + 2.20727I$ $b = 1.56778 - 3.17605I$	$2.3661 + 17.3165I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.016650-0.740942I$ $a=\ 1.34178-2.20727I$ $b=\ 1.56778+3.17605I$	$2.3661-17.3165I$	0
$u=-0.112674+0.678362I$ $a=\ 0.254326+0.561225I$ $b=\ 0.929761+0.461434I$	$0.24933+8.87552I$	$-6.42415-7.58828I$
$u=-0.112674-0.678362I$ $a=\ 0.254326-0.561225I$ $b=\ 0.929761-0.461434I$	$0.24933-8.87552I$	$-6.42415+7.58828I$
$u=-0.095198+0.648369I$ $a=-0.257752-0.658833I$ $b=-0.939789-0.327643I$	$2.30568+3.82799I$	$-3.04052-3.48068I$
$u=-0.095198-0.648369I$ $a=-0.257752+0.658833I$ $b=-0.939789+0.327643I$	$2.30568-3.82799I$	$-3.04052+3.48068I$
$u=-0.180364+0.604663I$ $a=\ 0.495672+0.639352I$ $b=\ 0.642731+0.286163I$	$-2.31740+1.66077I$	$-10.16858-2.73214I$
$u=-0.180364-0.604663I$ $a=\ 0.495672-0.639352I$ $b=\ 0.642731-0.286163I$	$-2.31740-1.66077I$	$-10.16858+2.73214I$
$u=-0.598144$ $a=\ 0.647574$ $b=\ 0.367048$	-0.843004	-11.7650
$u=-0.010244+0.579474I$ $a=-0.197590-0.954778I$ $b=-0.999928+0.022692I$	$2.95584+1.48192I$	$-1.41514-2.95992I$
$u=-0.010244-0.579474I$ $a=-0.197590+0.954778I$ $b=-0.999928-0.022692I$	$2.95584-1.48192I$	$-1.41514+2.95992I$

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.056043+0.556970I$		
$a=$	$0.110277+1.130210I$	$1.46285-3.40463I$	$-3.80359+2.83507I$
$b=$	$1.034060-0.226304I$		
$u=$	$0.056043-0.556970I$		
$a=$	$0.110277-1.130210I$	$1.46285+3.40463I$	$-3.80359-2.83507I$
$b=$	$1.034060+0.226304I$		
$u=$	$0.213318+0.171099I$		
$a=$	$0.30126+2.36442I$	$-0.33801+1.74815I$	$-2.36854-3.15485I$
$b=$	$0.286313-0.575206I$		
$u=$	$0.213318-0.171099I$		
$a=$	$0.30126-2.36442I$	$-0.33801-1.74815I$	$-2.36854+3.15485I$
$b=$	$0.286313+0.575206I$		

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^2a+6au-u^2+6u-11$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_5	$(u^2 - u + 1)^3$
c_2	$(u^2 + u + 1)^3$
c_4, c_8, c_9	u^6
c_6, c_{10}	$(u^3 - u^2 + 2u - 1)^2$
c_7	$(u^3 + u^2 - 1)^2$
c_{11}	$(u^3 - u^2 + 1)^2$
c_{12}	$(u^3 + u^2 + 2u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_5	$(y^2 + y + 1)^3$
c_4, c_8, c_9	y^6
c_6, c_{10}, c_{12}	$(y^3 + 3y^2 + 2y - 1)^2$
c_7, c_{11}	$(y^3 - y^2 + 2y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$ $a = 0.818128 + 0.292480I$ $b = -1.024480 + 0.839835I$	$3.02413 - 0.79824I$	$-4.03424 - 1.64667I$
$u = 0.877439 + 0.744862I$ $a = -0.155769 - 0.854759I$ $b = 1.239560 + 0.467306I$	$3.02413 - 4.85801I$	$-2.74410 + 7.22587I$
$u = 0.877439 - 0.744862I$ $a = 0.818128 - 0.292480I$ $b = -1.024480 - 0.839835I$	$3.02413 + 0.79824I$	$-4.03424 + 1.64667I$
$u = 0.877439 - 0.744862I$ $a = -0.155769 + 0.854759I$ $b = 1.239560 - 0.467306I$	$3.02413 + 4.85801I$	$-2.74410 - 7.22587I$
$u = -0.754878$ $a = -0.662359 + 1.147240I$ $b = 0.284920 - 0.493496I$	$-1.11345 + 2.02988I$	$-12.72167 - 5.84990I$
$u = -0.754878$ $a = -0.662359 - 1.147240I$ $b = 0.284920 + 0.493496I$	$-1.11345 - 2.02988I$	$-12.72167 + 5.84990I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2-u+1)^3)(u^{104}+48u^{103}+\cdots-24u+1)$
c_2	$((u^2+u+1)^3)(u^{104}+4u^{103}+\cdots+8u+1)$
c_3	$((u^2-u+1)^3)(u^{104}-4u^{103}+\cdots-644u+193)$
c_4, c_8	$u^6(u^{104}-u^{103}+\cdots-96u-64)$
c_5	$((u^2-u+1)^3)(u^{104}+4u^{103}+\cdots+8u+1)$
c_6	$((u^3-u^2+2u-1)^2)(u^{104}-3u^{103}+\cdots+14175u-2425)$
c_7	$((u^3+u^2-1)^2)(u^{104}+3u^{103}+\cdots-u-1)$
c_9	$u^6(u^{104}+35u^{103}+\cdots+82944u+4096)$
c_{10}	$((u^3-u^2+2u-1)^2)(u^{104}+33u^{103}+\cdots+11u+1)$
c_{11}	$((u^3-u^2+1)^2)(u^{104}+3u^{103}+\cdots-u-1)$
c_{12}	$((u^3+u^2+2u+1)^2)(u^{104}+33u^{103}+\cdots+11u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^2+y+1)^3)(y^{104}+20y^{103}+\cdots-556y+1)$
c_2, c_5	$((y^2+y+1)^3)(y^{104}+48y^{103}+\cdots-24y+1)$
c_3	$((y^2+y+1)^3)(y^{104}-8y^{103}+\cdots-3334440y+37249)$
c_4, c_8	$y^6(y^{104}-35y^{103}+\cdots-82944y+4096)$
c_6	$((y^3+3y^2+2y-1)^2)(y^{104}+19y^{103}+\cdots+1.27099\times10^8y+5880625)$
c_7, c_{11}	$((y^3-y^2+2y-1)^2)(y^{104}-33y^{103}+\cdots-11y+1)$
c_9	$y^6(y^{104}+57y^{103}+\cdots-5.71474\times10^8y+1.67772\times10^7)$
c_{10}, c_{12}	$((y^3+3y^2+2y-1)^2)(y^{104}+79y^{103}+\cdots+285y+1)$