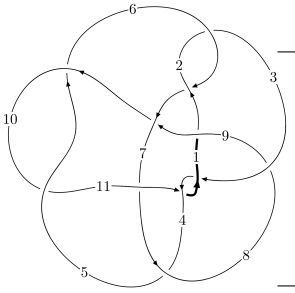
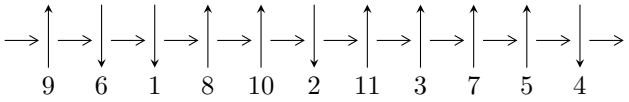
$11a_{322}$ $(K11a_{322})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 1.55718 \times 10^{218} u^{92} - 5.35792 \times 10^{218} u^{91} + \cdots + 2.85769 \times 10^{219} b + 6.67281 \times 10^{220}, \\ & - 4.75826 \times 10^{220} u^{92} - 1.96732 \times 10^{221} u^{91} + \cdots + 2.65765 \times 10^{221} a - 7.23028 \times 10^{221}, \\ & u^{93} + 3u^{92} + \cdots + 151u - 93 \rangle \\ I_2^u = \langle & 7565u^{17} - 6236u^{16} + \cdots + 1467b - 19294,\ 7565u^{17} - 7703u^{16} + \cdots + 1467a - 22228, \\ & u^{18} + 4u^{16} + 7u^{14} + u^{13} + 6u^{12} + 5u^{11} + 9u^{10} + 7u^9 + 23u^8 + 34u^6 - 7u^5 + 24u^4 - 5u^3 + 8u^2 - u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 111 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. $I_1^u = \langle \mathbf{1.56 \times 10^{218} u^{92} - 5.36 \times 10^{218} u^{91} + \cdots + 2.86 \times 10^{219} b + 6.67 \times 10^{220},\ -4.76 \times 10^{220} u^{92} - 1.97 \times 10^{221} u^{91} + \cdots + 2.66 \times 10^{221} a - 7.23 \times 10^{221},\ u^{93} + 3u^{92} + \cdots + 151u - 93} \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.179040u^{92} + 0.740246u^{91} + \cdots - 38.9739u + 2.72055 \\ -0.0544910u^{92} + 0.187491u^{91} + \cdots + 0.717266u - 23.3504 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.367272u^{92} + 1.08675u^{91} + \cdots - 47.4264u - 0.976846 \\ 0.614416u^{92} + 1.58014u^{91} + \cdots - 148.829u + 65.0773 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.368295u^{92} + 1.12010u^{91} + \cdots - 50.3896u + 18.6394 \\ -0.280113u^{92} - 0.773917u^{91} + \cdots + 81.2460u - 42.5382 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.233531u^{92} + 0.552755u^{91} + \cdots - 39.6912u + 26.0709 \\ -0.0544910u^{92} + 0.187491u^{91} + \cdots + 0.717266u - 23.3504 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.556184u^{92} + 1.87340u^{91} + \cdots - 89.5355u - 0.790115 \\ -0.0755262u^{92} - 0.326383u^{91} + \cdots + 1.89622u + 13.2151 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.0206578u^{92} + 0.0640587u^{91} + \cdots - 3.41149u + 8.80765 \\ -0.0463030u^{92} + 0.166139u^{91} + \cdots + 6.87334u - 20.0300 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.0387270u^{92} + 0.417865u^{91} + \cdots + 95.5003u - 88.9739 \\ 0.131928u^{92} + 0.259721u^{91} + \cdots - 44.1127u + 34.0669 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.0387270u^{92} + 0.417865u^{91} + \cdots + 95.5003u - 88.9739 \\ 0.131928u^{92} + 0.259721u^{91} + \cdots - 44.1127u + 34.0669 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 1.62307u^{92} + 5.49035u^{91} + \cdots - 409.463u + 157.721$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{93} - 5u^{92} + \cdots + 72835u - 5673$
c_2, c_6	$u^{93} + 3u^{92} + \cdots + 151u - 93$
c_3, c_{11}	$u^{93} - 5u^{92} + \cdots + 201u - 7$
c_4	$u^{93} - 5u^{92} + \cdots + 20u - 3$
c_5, c_{10}	$u^{93} - u^{92} + \cdots - 5563u - 397$
c_7	$u^{93} - 2u^{91} + \cdots - 16u - 3$
c_8	$u^{93} + u^{92} + \cdots - 588u - 239$
c_9	$u^{93} - 7u^{92} + \cdots - 37161u - 16439$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{93} - 33y^{92} + \cdots + 1446332815y - 32182929$
c_2, c_6	$y^{93} + 51y^{92} + \cdots + 26707y - 8649$
c_3, c_{11}	$y^{93} + 69y^{92} + \cdots + 4155y - 49$
c_4	$y^{93} + 3y^{92} + \cdots + 58y - 9$
c_5, c_{10}	$y^{93} + 65y^{92} + \cdots - 454143y - 157609$
c_7	$y^{93} - 4y^{92} + \cdots + 94y - 9$
c_8	$y^{93} - 17y^{92} + \cdots - 6001618y - 57121$
c_9	$y^{93} - 9y^{92} + \cdots + 5192486461y - 270240721$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.322622 + 0.930689I$ $a = -2.15336 + 0.73375I$ $b = -0.573278 + 0.461113I$	$-3.27973 - 4.30614I$	0
$u = 0.322622 - 0.930689I$ $a = -2.15336 - 0.73375I$ $b = -0.573278 - 0.461113I$	$-3.27973 + 4.30614I$	0
$u = -0.131902 + 0.954095I$ $a = -1.77797 - 0.58692I$ $b = -1.236380 + 0.556414I$	$3.10875 + 0.58240I$	0
$u = -0.131902 - 0.954095I$ $a = -1.77797 + 0.58692I$ $b = -1.236380 - 0.556414I$	$3.10875 - 0.58240I$	0
$u = -0.299211 + 0.900944I$ $a = 2.54722 + 1.40953I$ $b = 1.15602 + 1.37213I$	$0.45952 - 4.22823I$	0
$u = -0.299211 - 0.900944I$ $a = 2.54722 - 1.40953I$ $b = 1.15602 - 1.37213I$	$0.45952 + 4.22823I$	0
$u = -0.608017 + 0.715465I$ $a = 1.24868 - 1.08837I$ $b = 1.242490 - 0.457719I$	$-0.03049 + 2.41359I$	0
$u = -0.608017 - 0.715465I$ $a = 1.24868 + 1.08837I$ $b = 1.242490 + 0.457719I$	$-0.03049 - 2.41359I$	0
$u = 0.937372 + 0.000279I$ $a = -0.071937 - 0.342014I$ $b = 0.987401 + 0.314558I$	$4.23878 + 6.45548I$	0
$u = 0.937372 - 0.000279I$ $a = -0.071937 + 0.342014I$ $b = 0.987401 - 0.314558I$	$4.23878 - 6.45548I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.844094 + 0.653935I$ $a = 0.698181 + 0.068263I$ $b = -0.243081 + 0.556201I$	$-1.68544 - 3.00936I$	0
$u = 0.844094 - 0.653935I$ $a = 0.698181 - 0.068263I$ $b = -0.243081 - 0.556201I$	$-1.68544 + 3.00936I$	0
$u = 0.366246 + 0.856685I$ $a = 2.30851 - 0.38298I$ $b = 1.180700 - 0.617692I$	$-3.77658 + 0.38693I$	0
$u = 0.366246 - 0.856685I$ $a = 2.30851 + 0.38298I$ $b = 1.180700 + 0.617692I$	$-3.77658 - 0.38693I$	0
$u = -1.068810 + 0.000483I$ $a = 0.305136 - 0.317752I$ $b = -0.349343 - 0.764786I$	$-2.91806 + 1.82006I$	0
$u = -1.068810 - 0.000483I$ $a = 0.305136 + 0.317752I$ $b = -0.349343 + 0.764786I$	$-2.91806 - 1.82006I$	0
$u = -0.445066 + 0.987704I$ $a = -2.09200 - 0.52232I$ $b = -0.553513 - 1.003530I$	$-0.44062 + 9.04830I$	0
$u = -0.445066 - 0.987704I$ $a = -2.09200 + 0.52232I$ $b = -0.553513 + 1.003530I$	$-0.44062 - 9.04830I$	0
$u = -0.539921 + 0.940488I$ $a = 1.265850 + 0.049756I$ $b = 0.507207 + 0.197470I$	$-0.87942 + 2.94273I$	0
$u = -0.539921 - 0.940488I$ $a = 1.265850 - 0.049756I$ $b = 0.507207 - 0.197470I$	$-0.87942 - 2.94273I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.293670 + 1.064590I$ $a = -1.40531 - 0.46287I$ $b = -1.053630 + 0.748164I$	$3.49041 - 2.34482I$	0
$u = \quad 0.293670 - 1.064590I$ $a = -1.40531 + 0.46287I$ $b = -1.053630 - 0.748164I$	$3.49041 + 2.34482I$	0
$u = -0.197477 + 0.859125I$ $a = -0.06670 - 1.86214I$ $b = \quad 0.47109 - 2.64628I$	$0.11047 + 6.51793I$	0
$u = -0.197477 - 0.859125I$ $a = -0.06670 + 1.86214I$ $b = \quad 0.47109 + 2.64628I$	$0.11047 - 6.51793I$	0
$u = -0.620927 + 0.950340I$ $a = -1.34145 + 1.19160I$ $b = -1.93676 - 0.00311I$	$5.22424 + 2.46471I$	0
$u = -0.620927 - 0.950340I$ $a = -1.34145 - 1.19160I$ $b = -1.93676 + 0.00311I$	$5.22424 - 2.46471I$	0
$u = -1.114510 + 0.270069I$ $a = -0.159734 - 0.487015I$ $b = \quad 0.948829 - 0.853586I$	$0.05288 - 11.48280I$	0
$u = -1.114510 - 0.270069I$ $a = -0.159734 + 0.487015I$ $b = \quad 0.948829 + 0.853586I$	$0.05288 + 11.48280I$	0
$u = -0.436496 + 1.069900I$ $a = -1.20356 + 0.86385I$ $b = -1.25197 - 0.90240I$	$5.97802 + 3.41696I$	0
$u = -0.436496 - 1.069900I$ $a = -1.20356 - 0.86385I$ $b = -1.25197 + 0.90240I$	$5.97802 - 3.41696I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.318884 + 0.770726I$ $a = 1.183980 + 0.175323I$ $b = -0.190440 - 0.528926I$	$2.61018 + 0.55355I$	$5.97981 + 0.I$
$u = 0.318884 - 0.770726I$ $a = 1.183980 - 0.175323I$ $b = -0.190440 + 0.528926I$	$2.61018 - 0.55355I$	$5.97981 + 0.I$
$u = 0.319146 + 0.760564I$ $a = 0.498308 + 1.151370I$ $b = 0.66734 + 1.64554I$	$-4.14473 - 3.51278I$	$-1.54683 + 9.73709I$
$u = 0.319146 - 0.760564I$ $a = 0.498308 - 1.151370I$ $b = 0.66734 - 1.64554I$	$-4.14473 + 3.51278I$	$-1.54683 - 9.73709I$
$u = 1.126650 + 0.344072I$ $a = 0.024805 + 0.458219I$ $b = 0.802756 + 0.733051I$	$-4.77635 + 5.74683I$	0
$u = 1.126650 - 0.344072I$ $a = 0.024805 - 0.458219I$ $b = 0.802756 - 0.733051I$	$-4.77635 - 5.74683I$	0
$u = -0.803406 + 0.165006I$ $a = 0.431389 - 0.253688I$ $b = -0.291133 - 0.942335I$	$-2.78159 + 1.95644I$	$0. - 2.42185I$
$u = -0.803406 - 0.165006I$ $a = 0.431389 + 0.253688I$ $b = -0.291133 + 0.942335I$	$-2.78159 - 1.95644I$	$0. + 2.42185I$
$u = 0.098315 + 0.812310I$ $a = -2.40378 - 0.73606I$ $b = -0.486771 + 0.372378I$	$2.22253 - 2.87184I$	$5.92800 + 10.27307I$
$u = 0.098315 - 0.812310I$ $a = -2.40378 + 0.73606I$ $b = -0.486771 - 0.372378I$	$2.22253 + 2.87184I$	$5.92800 - 10.27307I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.263210+1.161530I$ $a=\ 0.745326-1.002680I$ $b=\ 0.436652+0.507867I$	$4.67249+3.86717I$	0
$u=-0.263210-1.161530I$ $a=\ 0.745326+1.002680I$ $b=\ 0.436652-0.507867I$	$4.67249-3.86717I$	0
$u=-1.102170+0.453309I$ $a=\ 0.344660-0.282026I$ $b=\ 0.587996-0.233648I$	$-1.79025+1.21167I$	0
$u=-1.102170-0.453309I$ $a=\ 0.344660+0.282026I$ $b=\ 0.587996+0.233648I$	$-1.79025-1.21167I$	0
$u=\ 0.374927+1.137660I$ $a=-0.449358-0.993803I$ $b=-1.033240-0.031958I$	$5.66136-0.33582I$	0
$u=\ 0.374927-1.137660I$ $a=-0.449358+0.993803I$ $b=-1.033240+0.031958I$	$5.66136+0.33582I$	0
$u=-0.172805+1.199490I$ $a=-1.60819-0.00472I$ $b=-1.55467-0.72808I$	$8.09781+2.55341I$	0
$u=-0.172805-1.199490I$ $a=-1.60819+0.00472I$ $b=-1.55467+0.72808I$	$8.09781-2.55341I$	0
$u=\ 0.067778+1.253000I$ $a=\ 0.686715+0.412175I$ $b=\ 0.469935-0.266987I$	$2.03743+2.00663I$	0
$u=\ 0.067778-1.253000I$ $a=\ 0.686715-0.412175I$ $b=\ 0.469935+0.266987I$	$2.03743-2.00663I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.723160 + 0.174661I$ $a = 0.836755 - 0.225299I$ $b = -0.761338 - 1.042850I$	$1.92000 + 3.17965I$	$4.65573 - 4.19725I$
$u = 0.723160 - 0.174661I$ $a = 0.836755 + 0.225299I$ $b = -0.761338 + 1.042850I$	$1.92000 - 3.17965I$	$4.65573 + 4.19725I$
$u = -0.403548 + 1.190460I$ $a = -0.364495 + 0.144692I$ $b = -0.418079 - 0.607354I$	$1.44049 + 2.66870I$	0
$u = -0.403548 - 1.190460I$ $a = -0.364495 - 0.144692I$ $b = -0.418079 + 0.607354I$	$1.44049 - 2.66870I$	0
$u = 0.261222 + 0.695240I$ $a = -0.225493 + 0.262106I$ $b = -0.276840 - 1.313040I$	$-4.08056 + 1.50596I$	$0.83759 + 2.64217I$
$u = 0.261222 - 0.695240I$ $a = -0.225493 - 0.262106I$ $b = -0.276840 + 1.313040I$	$-4.08056 - 1.50596I$	$0.83759 - 2.64217I$
$u = -0.707177 + 0.220909I$ $a = 0.511993 - 0.477897I$ $b = 0.437276 + 0.272075I$	$-1.39598 + 1.17736I$	$-3.93052 - 4.80087I$
$u = -0.707177 - 0.220909I$ $a = 0.511993 + 0.477897I$ $b = 0.437276 - 0.272075I$	$-1.39598 - 1.17736I$	$-3.93052 + 4.80087I$
$u = 0.504232 + 1.159730I$ $a = -1.99380 + 0.16893I$ $b = -1.55624 + 1.52324I$	$4.76534 - 7.79767I$	0
$u = 0.504232 - 1.159730I$ $a = -1.99380 - 0.16893I$ $b = -1.55624 - 1.52324I$	$4.76534 + 7.79767I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.346185 + 1.236500I$ $a = -0.702997 + 0.404800I$ $b = -0.464835 + 1.306190I$	$4.73642 - 6.03450I$	0
$u = 0.346185 - 1.236500I$ $a = -0.702997 - 0.404800I$ $b = -0.464835 - 1.306190I$	$4.73642 + 6.03450I$	0
$u = -0.504738 + 0.496846I$ $a = 0.289551 - 0.207560I$ $b = -0.28960 + 1.49053I$	$-1.87848 - 5.13684I$	$0.46607 + 1.98262I$
$u = -0.504738 - 0.496846I$ $a = 0.289551 + 0.207560I$ $b = -0.28960 - 1.49053I$	$-1.87848 + 5.13684I$	$0.46607 - 1.98262I$
$u = -0.463746 + 1.210540I$ $a = -1.68232 - 0.35122I$ $b = -1.33627 - 1.18381I$	$0.97476 + 6.41730I$	0
$u = -0.463746 - 1.210540I$ $a = -1.68232 + 0.35122I$ $b = -1.33627 + 1.18381I$	$0.97476 - 6.41730I$	0
$u = -0.416030 + 1.283650I$ $a = 1.279510 - 0.430873I$ $b = 0.913703 + 0.533909I$	$3.10293 + 5.33107I$	0
$u = -0.416030 - 1.283650I$ $a = 1.279510 + 0.430873I$ $b = 0.913703 - 0.533909I$	$3.10293 - 5.33107I$	0
$u = 0.485082 + 1.270200I$ $a = 1.286330 + 0.485594I$ $b = 1.140580 - 0.783321I$	$8.11494 - 11.47080I$	0
$u = 0.485082 - 1.270200I$ $a = 1.286330 - 0.485594I$ $b = 1.140580 + 0.783321I$	$8.11494 + 11.47080I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.318984 + 1.325490I$ $a = -1.49667 + 0.72618I$ $b = -1.52310 + 1.21358I$	$4.36272 - 6.42244I$	0
$u = 0.318984 - 1.325490I$ $a = -1.49667 - 0.72618I$ $b = -1.52310 - 1.21358I$	$4.36272 + 6.42244I$	0
$u = 0.454840 + 1.316880I$ $a = 1.067410 + 0.460691I$ $b = 1.218720 - 0.165295I$	$8.34403 + 1.38464I$	0
$u = 0.454840 - 1.316880I$ $a = 1.067410 - 0.460691I$ $b = 1.218720 + 0.165295I$	$8.34403 - 1.38464I$	0
$u = -0.537415 + 0.281055I$ $a = 1.260790 - 0.030814I$ $b = -0.910843 + 0.095195I$	$3.79529 + 0.46350I$	$6.87686 - 1.81955I$
$u = -0.537415 - 0.281055I$ $a = 1.260790 + 0.030814I$ $b = -0.910843 - 0.095195I$	$3.79529 - 0.46350I$	$6.87686 + 1.81955I$
$u = 1.286610 + 0.581347I$ $a = -0.050685 - 0.472761I$ $b = -0.587209 - 0.338343I$	$-2.62056 - 2.77773I$	0
$u = 1.286610 - 0.581347I$ $a = -0.050685 + 0.472761I$ $b = -0.587209 + 0.338343I$	$-2.62056 + 2.77773I$	0
$u = 0.64633 + 1.26191I$ $a = 1.50927 + 0.08635I$ $b = 1.32829 - 0.92505I$	$-1.80023 - 12.03950I$	0
$u = 0.64633 - 1.26191I$ $a = 1.50927 - 0.08635I$ $b = 1.32829 + 0.92505I$	$-1.80023 + 12.03950I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.63602+1.27863I$ $a=\ \ 1.61271-0.05318I$ $b=\ \ 1.51527+1.12304I$	$3.2415+17.6972I$	0
$u=-0.63602-1.27863I$ $a=\ \ 1.61271+0.05318I$ $b=\ \ 1.51527-1.12304I$	$3.2415-17.6972I$	0
$u=-0.64483+1.27730I$ $a=\ \ 1.322000-0.207651I$ $b=\ \ 1.149910+0.457616I$	$1.14741+5.18553I$	0
$u=-0.64483-1.27730I$ $a=\ \ 1.322000+0.207651I$ $b=\ \ 1.149910-0.457616I$	$1.14741-5.18553I$	0
$u=\ \ 0.75806+1.21920I$ $a=-1.019030-0.222304I$ $b=-1.169210+0.601044I$	$-0.38282-4.43447I$	0
$u=\ \ 0.75806-1.21920I$ $a=-1.019030+0.222304I$ $b=-1.169210-0.601044I$	$-0.38282+4.43447I$	0
$u=-0.17338+1.45635I$ $a=\ \ 0.435396-0.500933I$ $b=\ \ 0.629853+0.200440I$	$6.38181-6.72088I$	0
$u=-0.17338-1.45635I$ $a=\ \ 0.435396+0.500933I$ $b=\ \ 0.629853-0.200440I$	$6.38181+6.72088I$	0
$u=-0.60980+1.41004I$ $a=-1.062230-0.285672I$ $b=-1.02118-1.10338I$	$1.58527+7.93902I$	0
$u=-0.60980-1.41004I$ $a=-1.062230+0.285672I$ $b=-1.02118+1.10338I$	$1.58527-7.93902I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.397627 + 0.073937I$ $a = 2.09557 + 1.13944I$ $b = 0.067177 - 0.787475I$	$1.30018 + 2.88591I$	$1.12552 - 3.03882I$
$u = 0.397627 - 0.073937I$ $a = 2.09557 - 1.13944I$ $b = 0.067177 + 0.787475I$	$1.30018 - 2.88591I$	$1.12552 + 3.03882I$
$u = 0.297157$ $a = 1.24210$ $b = -0.580477$	0.917664	11.3240

II. $I_2^u = \langle 7565u^{17} - 6236u^{16} + \cdots + 1467b - 19294,\ 7565u^{17} - 7703u^{16} + \cdots + 1467a - 22228,\ u^{18} + 4u^{16} + \cdots - u + 1\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -5.15678u^{17} + 5.25085u^{16} + \cdots - 24.1220u + 15.1520 \\ -5.15678u^{17} + 4.25085u^{16} + \cdots - 23.1220u + 13.1520 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -10.8609u^{17} - 2.02249u^{16} + \cdots - 25.5787u + 2.58691 \\ -5.70416u^{17} - 2.27335u^{16} + \cdots - 7.45671u - 6.56510 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.654397u^{17} + 2.95297u^{16} + \cdots + 1.33538u + 1.40900 \\ 4.86980u^{17} - 0.591684u^{16} + \cdots + 11.9291u - 2.95637 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{16} + 3u^{14} + \cdots - u + 2 \\ -5.15678u^{17} + 4.25085u^{16} + \cdots - 23.1220u + 13.1520 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -5u^{17} - 16u^{15} + \cdots + 6u^2 - 7u \\ -6.31766u^{17} - 3.29175u^{16} + \cdots - 10.0211u - 8.44853 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -1.99864u^{17} + 2.59782u^{16} + \cdots - 10.4076u + 6.25085 \\ -3.80164u^{17} + 3.48262u^{16} + \cdots - 17.3108u + 10.4990 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 10.3102u^{17} - 0.496251u^{16} + \cdots + 18.2631u + 4.06885 \\ -5.61145u^{17} + 2.37832u^{16} + \cdots - 20.1759u + 9.49284 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 10.3102u^{17} - 0.496251u^{16} + \cdots + 18.2631u + 4.06885 \\ -5.61145u^{17} + 2.37832u^{16} + \cdots - 20.1759u + 9.49284 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{2194}{163}u^{17} + \frac{935}{163}u^{16} + \cdots - \frac{5285}{163}u + \frac{3315}{163}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 2u^{16} + \cdots + u + 1$
c_2	$u^{18} + 4u^{16} + \cdots + u + 1$
c_3	$u^{18} + 2u^{17} + \cdots + 13u + 3$
c_4	$u^{18} + 7u^{15} + \cdots + 2u + 1$
c_5	$u^{18} + 7u^{16} + \cdots - 5u + 3$
c_6	$u^{18} + 4u^{16} + \cdots - u + 1$
c_7	$u^{18} - 3u^{17} + \cdots + 4u + 1$
c_8	$u^{18} - 4u^{16} + \cdots + 8u + 3$
c_9	$u^{18} - 8u^{17} + \cdots - 13u + 3$
c_{10}	$u^{18} + 7u^{16} + \cdots + 5u + 3$
c_{11}	$u^{18} - 2u^{17} + \cdots - 13u + 3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} - 4y^{17} + \cdots - 13y + 1$
c_2, c_6	$y^{18} + 8y^{17} + \cdots + 15y + 1$
c_3, c_{11}	$y^{18} + 14y^{17} + \cdots + 11y + 9$
c_4	$y^{18} + 8y^{16} + \cdots + 4y + 1$
c_5, c_{10}	$y^{18} + 14y^{17} + \cdots + 101y + 9$
c_7	$y^{18} + y^{17} + \cdots + 4y + 1$
c_8	$y^{18} - 8y^{17} + \cdots - 64y + 9$
c_9	$y^{18} + 8y^{17} + \cdots + 77y + 9$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.350285 + 0.978445I$ $a = -1.22969 - 1.09369I$ $b = -1.56223 + 0.28495I$	$6.43935 - 1.44640I$	$11.71956 + 0.68048I$
$u = 0.350285 - 0.978445I$ $a = -1.22969 + 1.09369I$ $b = -1.56223 - 0.28495I$	$6.43935 + 1.44640I$	$11.71956 - 0.68048I$
$u = -0.299863 + 1.124440I$ $a = -0.960763 + 0.520688I$ $b = -0.601230 - 0.869213I$	$3.99972 + 3.99910I$	$5.21893 - 5.75182I$
$u = -0.299863 - 1.124440I$ $a = -0.960763 - 0.520688I$ $b = -0.601230 + 0.869213I$	$3.99972 - 3.99910I$	$5.21893 + 5.75182I$
$u = -1.155830 + 0.431712I$ $a = -0.246439 + 0.399491I$ $b = -0.629155 + 0.221809I$	$-1.56279 + 1.31651I$	$14.0169 - 6.4824I$
$u = -1.155830 - 0.431712I$ $a = -0.246439 - 0.399491I$ $b = -0.629155 - 0.221809I$	$-1.56279 - 1.31651I$	$14.0169 + 6.4824I$
$u = -0.102450 + 0.758852I$ $a = 2.28881 + 1.12597I$ $b = 0.249088 + 0.396273I$	$2.26028 - 2.23530I$	$7.59117 - 1.84623I$
$u = -0.102450 - 0.758852I$ $a = 2.28881 - 1.12597I$ $b = 0.249088 - 0.396273I$	$2.26028 + 2.23530I$	$7.59117 + 1.84623I$
$u = 1.098450 + 0.573725I$ $a = 0.327736 + 0.283089I$ $b = -0.039423 + 0.529582I$	$-3.30474 - 3.34770I$	$-4.63686 + 7.62812I$
$u = 1.098450 - 0.573725I$ $a = 0.327736 - 0.283089I$ $b = -0.039423 - 0.529582I$	$-3.30474 + 3.34770I$	$-4.63686 - 7.62812I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.399200 + 1.291310I$ $a = -1.42969 + 0.81322I$ $b = -1.04507 + 1.59362I$	$3.03940 - 7.57505I$	$5.54978 + 7.69435I$
$u = 0.399200 - 1.291310I$ $a = -1.42969 - 0.81322I$ $b = -1.04507 - 1.59362I$	$3.03940 + 7.57505I$	$5.54978 - 7.69435I$
$u = 0.238196 + 0.578880I$ $a = 1.57746 + 0.63148I$ $b = 0.368298 + 1.093560I$	$-3.97474 - 2.70415I$	$-0.079815 + 1.320496I$
$u = 0.238196 - 0.578880I$ $a = 1.57746 - 0.63148I$ $b = 0.368298 - 1.093560I$	$-3.97474 + 2.70415I$	$-0.079815 - 1.320496I$
$u = -0.556386 + 1.270950I$ $a = -1.291890 + 0.041356I$ $b = -1.145860 - 0.634153I$	$1.64477 + 4.87461I$	$7.20857 - 3.63831I$
$u = -0.556386 - 1.270950I$ $a = -1.291890 - 0.041356I$ $b = -1.145860 + 0.634153I$	$1.64477 - 4.87461I$	$7.20857 + 3.63831I$
$u = 0.028401 + 0.600952I$ $a = 1.96447 - 2.20586I$ $b = 0.40558 - 2.12267I$	$-0.31658 + 5.63779I$	$2.91181 - 3.68559I$
$u = 0.028401 - 0.600952I$ $a = 1.96447 + 2.20586I$ $b = 0.40558 + 2.12267I$	$-0.31658 - 5.63779I$	$2.91181 + 3.68559I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18}-2u^{16}+\cdots+u+1)(u^{93}-5u^{92}+\cdots+72835u-5673)$
c_2	$(u^{18}+4u^{16}+\cdots+u+1)(u^{93}+3u^{92}+\cdots+151u-93)$
c_3	$(u^{18}+2u^{17}+\cdots+13u+3)(u^{93}-5u^{92}+\cdots+201u-7)$
c_4	$(u^{18}+7u^{15}+\cdots+2u+1)(u^{93}-5u^{92}+\cdots+20u-3)$
c_5	$(u^{18}+7u^{16}+\cdots-5u+3)(u^{93}-u^{92}+\cdots-5563u-397)$
c_6	$(u^{18}+4u^{16}+\cdots-u+1)(u^{93}+3u^{92}+\cdots+151u-93)$
c_7	$(u^{18}-3u^{17}+\cdots+4u+1)(u^{93}-2u^{91}+\cdots-16u-3)$
c_8	$(u^{18}-4u^{16}+\cdots+8u+3)(u^{93}+u^{92}+\cdots-588u-239)$
c_9	$(u^{18}-8u^{17}+\cdots-13u+3)(u^{93}-7u^{92}+\cdots-37161u-16439)$
c_{10}	$(u^{18}+7u^{16}+\cdots+5u+3)(u^{93}-u^{92}+\cdots-5563u-397)$
c_{11}	$(u^{18}-2u^{17}+\cdots-13u+3)(u^{93}-5u^{92}+\cdots+201u-7)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18}-4y^{17}+\cdots-13y+1)$ $\cdot(y^{93}-33y^{92}+\cdots+1446332815y-32182929)$
c_2, c_6	$(y^{18}+8y^{17}+\cdots+15y+1)(y^{93}+51y^{92}+\cdots+26707y-8649)$
c_3, c_{11}	$(y^{18}+14y^{17}+\cdots+11y+9)(y^{93}+69y^{92}+\cdots+4155y-49)$
c_4	$(y^{18}+8y^{16}+\cdots+4y+1)(y^{93}+3y^{92}+\cdots+58y-9)$
c_5, c_{10}	$(y^{18}+14y^{17}+\cdots+101y+9)$ $\cdot(y^{93}+65y^{92}+\cdots-454143y-157609)$
c_7	$(y^{18}+y^{17}+\cdots+4y+1)(y^{93}-4y^{92}+\cdots+94y-9)$
c_8	$(y^{18}-8y^{17}+\cdots-64y+9)(y^{93}-17y^{92}+\cdots-6001618y-57121)$
c_9	$(y^{18}+8y^{17}+\cdots+77y+9)$ $\cdot(y^{93}-9y^{92}+\cdots+5192486461y-270240721)$