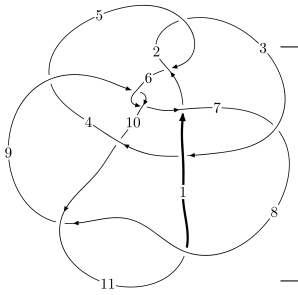
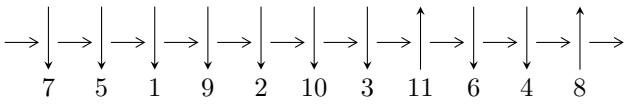
$11a_{276}$ $(K11a_{276})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -6.63399 \times 10^{307} u^{102} - 1.76777 \times 10^{308} u^{101} + \cdots + 4.99508 \times 10^{308} b - 1.10340 \times 10^{310}, \\ & - 1.30225 \times 10^{312} u^{102} - 4.26703 \times 10^{312} u^{101} + \cdots + 9.25589 \times 10^{311} a - 2.15727 \times 10^{314}, \\ & u^{103} + 4u^{102} + \cdots + 469u + 109 \rangle \\ I_2^u = \langle & 425805u^{22} + 807010u^{21} + \cdots + 75671b - 868327, \\ & 637990u^{22} + 1114149u^{21} + \cdots + 75671a - 1825552,\ u^{23} + u^{22} + \cdots - u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 126 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. $\boldsymbol{I_1^u = \langle -6.63 \times 10^{307} u^{102} - 1.77 \times 10^{308} u^{101} + \cdots + 5.00 \times 10^{308} b - 1.10 \times 10^{310},\ -1.30 \times 10^{312} u^{102} - 4.27 \times 10^{312} u^{101} + \cdots + 9.26 \times 10^{311} a - 2.16 \times 10^{314},\ u^{103} + 4u^{102} + \cdots + 469u + 109 \rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1.40695u^{102} + 4.61007u^{101} + \cdots + 669.071u + 233.070 \\ 0.132810u^{102} + 0.353902u^{101} + \cdots + 73.4026u + 22.0898 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 1.87065u^{102} + 6.06248u^{101} + \cdots + 892.642u + 307.136 \\ -0.0468750u^{102} - 0.221872u^{101} + \cdots - 11.9894u - 8.11502 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1.36603u^{102} + 4.42797u^{101} + \cdots + 693.873u + 231.792 \\ -1.58180u^{102} - 5.10772u^{101} + \cdots - 663.580u - 223.501 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.21417u^{102} + 3.86488u^{101} + \cdots + 592.926u + 185.516 \\ -0.285401u^{102} - 0.925876u^{101} + \cdots - 159.269u - 55.0124 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.215772u^{102} - 0.679745u^{101} + \cdots + 30.2932u + 8.29123 \\ -1.58180u^{102} - 5.10772u^{101} + \cdots - 663.580u - 223.501 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -1.06595u^{102} - 3.65972u^{101} + \cdots - 348.557u - 134.481 \\ 0.221450u^{102} + 0.663808u^{101} + \cdots + 175.345u + 53.4208 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.892276u^{102} + 2.72947u^{101} + \cdots + 475.525u + 146.323 \\ 0.0338094u^{102} + 0.114168u^{101} + \cdots - 50.4001u - 16.4134 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.892276u^{102} + 2.72947u^{101} + \cdots + 475.525u + 146.323 \\ 0.0338094u^{102} + 0.114168u^{101} + \cdots - 50.4001u - 16.4134 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -1.28824u^{102} - 4.05511u^{101} + \cdots - 372.365u - 118.415$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{103}+u^{102}+\cdots-35693u+3817$
c_2, c_5	$u^{103}+7u^{102}+\cdots-488u+403$
c_3	$u^{103}-8u^{102}+\cdots-52u+8$
c_4	$u^{103}-u^{102}+\cdots+257024u+34816$
c_6, c_9	$u^{103}+4u^{102}+\cdots+469u+109$
c_7	$u^{103}-u^{102}+\cdots-6340u+2537$
c_8, c_{11}	$u^{103}+5u^{102}+\cdots+44u+1$
c_{10}	$u^{103}+2u^{102}+\cdots+366u+343$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{103} + 17y^{102} + \cdots - 648571579y - 14569489$
c_2, c_5	$y^{103} + 53y^{102} + \cdots - 6001908y - 162409$
c_3	$y^{103} - 16y^{102} + \cdots + 1424y - 64$
c_4	$y^{103} - 23y^{102} + \cdots - 61678288896y - 1212153856$
c_6, c_9	$y^{103} - 56y^{102} + \cdots + 439051y - 11881$
c_7	$y^{103} - 17y^{102} + \cdots + 318453760y - 6436369$
c_8, c_{11}	$y^{103} + 75y^{102} + \cdots + 218y - 1$
c_{10}	$y^{103} - 22y^{102} + \cdots - 423762y - 117649$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.836526 + 0.521144I$ $a = -0.985823 - 0.669717I$ $b = 1.50275 + 0.04934I$	$4.06422 - 1.55716I$	0
$u = 0.836526 - 0.521144I$ $a = -0.985823 + 0.669717I$ $b = 1.50275 - 0.04934I$	$4.06422 + 1.55716I$	0
$u = 0.993660 + 0.225274I$ $a = 1.061870 - 0.596347I$ $b = -0.401587 + 0.125535I$	$-3.45329 - 0.72831I$	0
$u = 0.993660 - 0.225274I$ $a = 1.061870 + 0.596347I$ $b = -0.401587 - 0.125535I$	$-3.45329 + 0.72831I$	0
$u = -0.596338 + 0.760820I$ $a = 1.104950 + 0.053850I$ $b = -1.69790 - 0.01032I$	$-1.79270 + 5.83133I$	0
$u = -0.596338 - 0.760820I$ $a = 1.104950 - 0.053850I$ $b = -1.69790 + 0.01032I$	$-1.79270 - 5.83133I$	0
$u = -0.990596 + 0.302063I$ $a = -1.228230 - 0.676620I$ $b = 0.301914 + 0.719171I$	$-6.78852 + 0.94980I$	0
$u = -0.990596 - 0.302063I$ $a = -1.228230 + 0.676620I$ $b = 0.301914 - 0.719171I$	$-6.78852 - 0.94980I$	0
$u = -0.859460 + 0.434428I$ $a = 0.870257 - 1.037170I$ $b = -1.400350 + 0.152499I$	$0.99501 - 2.77150I$	0
$u = -0.859460 - 0.434428I$ $a = 0.870257 + 1.037170I$ $b = -1.400350 - 0.152499I$	$0.99501 + 2.77150I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.008990 + 0.333497I$ $a = 0.587893 - 0.996855I$ $b = 0.421890 + 0.300714I$	$-4.90999 + 1.62359I$	0
$u = 1.008990 - 0.333497I$ $a = 0.587893 + 0.996855I$ $b = 0.421890 - 0.300714I$	$-4.90999 - 1.62359I$	0
$u = -1.056400 + 0.118838I$ $a = -1.320910 - 0.499770I$ $b = 0.282188 - 0.306999I$	$-6.86537 + 0.18608I$	0
$u = -1.056400 - 0.118838I$ $a = -1.320910 + 0.499770I$ $b = 0.282188 + 0.306999I$	$-6.86537 - 0.18608I$	0
$u = -0.511134 + 0.942278I$ $a = -0.510309 + 0.785824I$ $b = 0.728221 + 0.240175I$	$-1.43885 + 1.18607I$	0
$u = -0.511134 - 0.942278I$ $a = -0.510309 - 0.785824I$ $b = 0.728221 - 0.240175I$	$-1.43885 - 1.18607I$	0
$u = 0.109315 + 1.067490I$ $a = -1.044520 - 0.288762I$ $b = 1.57761 + 0.30682I$	$2.96478 + 2.48304I$	0
$u = 0.109315 - 1.067490I$ $a = -1.044520 + 0.288762I$ $b = 1.57761 - 0.30682I$	$2.96478 - 2.48304I$	0
$u = 0.937699 + 0.556938I$ $a = 1.011270 + 0.137655I$ $b = -1.39291 + 1.14364I$	$-5.15763 - 4.84349I$	0
$u = 0.937699 - 0.556938I$ $a = 1.011270 - 0.137655I$ $b = -1.39291 - 1.14364I$	$-5.15763 + 4.84349I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.339610 + 0.817318I$ $a = 1.330100 + 0.155899I$ $b = -0.950681 + 1.002080I$	$0.89894 - 3.65454I$	0
$u = 0.339610 - 0.817318I$ $a = 1.330100 - 0.155899I$ $b = -0.950681 - 1.002080I$	$0.89894 + 3.65454I$	0
$u = -0.349145 + 1.075030I$ $a = -0.568975 + 0.272748I$ $b = 1.65574 + 0.67973I$	$1.62245 + 2.60387I$	0
$u = -0.349145 - 1.075030I$ $a = -0.568975 - 0.272748I$ $b = 1.65574 - 0.67973I$	$1.62245 - 2.60387I$	0
$u = -1.098200 + 0.303797I$ $a = -0.529365 + 0.760181I$ $b = 1.68166 - 0.68588I$	$1.50077 + 3.70830I$	0
$u = -1.098200 - 0.303797I$ $a = -0.529365 - 0.760181I$ $b = 1.68166 + 0.68588I$	$1.50077 - 3.70830I$	0
$u = 1.063430 + 0.415070I$ $a = 0.731892 + 0.899330I$ $b = -2.15499 + 0.13134I$	$0.28023 - 8.17446I$	0
$u = 1.063430 - 0.415070I$ $a = 0.731892 - 0.899330I$ $b = -2.15499 - 0.13134I$	$0.28023 + 8.17446I$	0
$u = 0.843079 + 0.004461I$ $a = 0.94258 - 1.29640I$ $b = -1.020810 - 0.804279I$	$-3.90048 + 2.86379I$	$-12.70957 - 3.37032I$
$u = 0.843079 - 0.004461I$ $a = 0.94258 + 1.29640I$ $b = -1.020810 + 0.804279I$	$-3.90048 - 2.86379I$	$-12.70957 + 3.37032I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.689090 + 0.465253I$ $a = 0.78192 + 1.48139I$ $b = -0.629855 + 0.656777I$	$4.53262 - 2.55951I$	$0. + 5.41774I$
$u = 0.689090 - 0.465253I$ $a = 0.78192 - 1.48139I$ $b = -0.629855 - 0.656777I$	$4.53262 + 2.55951I$	$0. - 5.41774I$
$u = -0.769786 + 0.307928I$ $a = -0.75555 + 1.87167I$ $b = 0.724465 + 0.765281I$	$1.44846 + 6.07423I$	$-8.51983 - 8.95436I$
$u = -0.769786 - 0.307928I$ $a = -0.75555 - 1.87167I$ $b = 0.724465 - 0.765281I$	$1.44846 - 6.07423I$	$-8.51983 + 8.95436I$
$u = -1.122930 + 0.341047I$ $a = -0.446173 - 0.391470I$ $b = -0.213672 - 0.213557I$	$-1.62676 + 1.19848I$	0
$u = -1.122930 - 0.341047I$ $a = -0.446173 + 0.391470I$ $b = -0.213672 + 0.213557I$	$-1.62676 - 1.19848I$	0
$u = 1.140180 + 0.372827I$ $a = -0.604590 - 0.755206I$ $b = 1.91092 - 1.75877I$	$-5.82282 - 8.40734I$	0
$u = 1.140180 - 0.372827I$ $a = -0.604590 + 0.755206I$ $b = 1.91092 + 1.75877I$	$-5.82282 + 8.40734I$	0
$u = 1.026990 + 0.626258I$ $a = -0.231968 - 0.570644I$ $b = 1.72440 + 0.28794I$	$-0.98951 - 1.68305I$	0
$u = 1.026990 - 0.626258I$ $a = -0.231968 + 0.570644I$ $b = 1.72440 - 0.28794I$	$-0.98951 + 1.68305I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.402294+0.678247I$ $a=\ \ 0.93978-1.32938I$ $b=-1.48153+0.09132I$	$-1.22583-3.66754I$	$-9.11449+4.85815I$
$u=-0.402294-0.678247I$ $a=\ \ 0.93978+1.32938I$ $b=-1.48153-0.09132I$	$-1.22583+3.66754I$	$-9.11449-4.85815I$
$u=\ \ 1.189940+0.245612I$ $a=\ \ 0.883135+0.115093I$ $b=-0.190686-0.130746I$	$-5.91342-3.60860I$	0
$u=\ \ 1.189940-0.245612I$ $a=\ \ 0.883135-0.115093I$ $b=-0.190686+0.130746I$	$-5.91342+3.60860I$	0
$u=\ \ 0.052145+0.782484I$ $a=-1.50194-0.43540I$ $b=\ \ 1.232120+0.323710I$	$2.77716+2.41448I$	$-4.53664-0.91348I$
$u=\ \ 0.052145-0.782484I$ $a=-1.50194+0.43540I$ $b=\ \ 1.232120-0.323710I$	$2.77716-2.41448I$	$-4.53664+0.91348I$
$u=-1.090480+0.551048I$ $a=-1.055870+0.721445I$ $b=\ \ 1.95862+1.14773I$	$-3.25503+8.43750I$	0
$u=-1.090480-0.551048I$ $a=-1.055870-0.721445I$ $b=\ \ 1.95862-1.14773I$	$-3.25503-8.43750I$	0
$u=-0.321016+1.182120I$ $a=-0.816921+0.677320I$ $b=\ \ 1.66328-0.04493I$	$-0.49197-11.78540I$	0
$u=-0.321016-1.182120I$ $a=-0.816921-0.677320I$ $b=\ \ 1.66328+0.04493I$	$-0.49197+11.78540I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.096860+0.556302I$ $a=\ \ 0.397651-0.643161I$ $b=-1.74397-0.16687I$	$-0.17581+2.44610I$	0
$u=-1.096860-0.556302I$ $a=\ \ 0.397651+0.643161I$ $b=-1.74397+0.16687I$	$-0.17581-2.44610I$	0
$u=-1.206520+0.374371I$ $a=\ \ 0.510833-0.633514I$ $b=-1.70086-1.25903I$	$-2.24342+2.29276I$	0
$u=-1.206520-0.374371I$ $a=\ \ 0.510833+0.633514I$ $b=-1.70086+1.25903I$	$-2.24342-2.29276I$	0
$u=-0.100398+0.728114I$ $a=\ \ 0.369502+1.030620I$ $b=-1.090540-0.334120I$	$-3.43026-6.84438I$	$-9.15397+4.49126I$
$u=-0.100398-0.728114I$ $a=\ \ 0.369502-1.030620I$ $b=-1.090540+0.334120I$	$-3.43026+6.84438I$	$-9.15397-4.49126I$
$u=-0.730778+0.024594I$ $a=-0.399238-1.036930I$ $b=\ \ 2.04057-0.63998I$	$0.633867+0.803768I$	$-7.63171+0.92685I$
$u=-0.730778-0.024594I$ $a=-0.399238+1.036930I$ $b=\ \ 2.04057+0.63998I$	$0.633867-0.803768I$	$-7.63171-0.92685I$
$u=\ \ 0.355810+1.220390I$ $a=\ \ 0.732143+0.582141I$ $b=-1.59753+0.19599I$	$4.14010+5.70398I$	0
$u=\ \ 0.355810-1.220390I$ $a=\ \ 0.732143-0.582141I$ $b=-1.59753-0.19599I$	$4.14010-5.70398I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.168290 + 0.508172I$ $a = 0.854222 + 0.727442I$ $b = -1.64945 + 0.79028I$	$-0.30412 - 7.10088I$	0
$u = 1.168290 - 0.508172I$ $a = 0.854222 - 0.727442I$ $b = -1.64945 - 0.79028I$	$-0.30412 + 7.10088I$	0
$u = 1.182880 + 0.489928I$ $a = -0.619090 + 0.541895I$ $b = 0.230254 - 0.078235I$	$-1.60861 - 6.49346I$	0
$u = 1.182880 - 0.489928I$ $a = -0.619090 - 0.541895I$ $b = 0.230254 + 0.078235I$	$-1.60861 + 6.49346I$	0
$u = -0.480657 + 0.534207I$ $a = -0.339079 + 0.353240I$ $b = -0.232339 + 0.496764I$	$-1.05237 + 1.81935I$	$-6.00348 - 3.96676I$
$u = -0.480657 - 0.534207I$ $a = -0.339079 - 0.353240I$ $b = -0.232339 - 0.496764I$	$-1.05237 - 1.81935I$	$-6.00348 + 3.96676I$
$u = -1.183850 + 0.498766I$ $a = 0.782554 + 0.650321I$ $b = -0.038507 - 0.250979I$	$-6.51949 + 11.45360I$	0
$u = -1.183850 - 0.498766I$ $a = 0.782554 - 0.650321I$ $b = -0.038507 + 0.250979I$	$-6.51949 - 11.45360I$	0
$u = 1.218530 + 0.411280I$ $a = -0.596314 - 0.505551I$ $b = 1.20991 - 1.49840I$	$-7.13489 + 2.71411I$	0
$u = 1.218530 - 0.411280I$ $a = -0.596314 + 0.505551I$ $b = 1.20991 + 1.49840I$	$-7.13489 - 2.71411I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.106860 + 0.693628I$ $a = -0.154203 + 0.682438I$ $b = 0.725781 + 0.104715I$	$1.49461 + 1.97845I$	$-4.28245 - 4.91364I$
$u = 0.106860 - 0.693628I$ $a = -0.154203 - 0.682438I$ $b = 0.725781 - 0.104715I$	$1.49461 - 1.97845I$	$-4.28245 + 4.91364I$
$u = -1.289100 + 0.419570I$ $a = -0.853267 + 0.726222I$ $b = 1.042190 + 0.763261I$	$-3.84070 + 7.79723I$	0
$u = -1.289100 - 0.419570I$ $a = -0.853267 - 0.726222I$ $b = 1.042190 - 0.763261I$	$-3.84070 - 7.79723I$	0
$u = 0.501822 + 0.395796I$ $a = -1.07177 - 1.98688I$ $b = 1.18109 - 0.94964I$	$2.05671 + 4.61879I$	$-1.72164 - 0.99130I$
$u = 0.501822 - 0.395796I$ $a = -1.07177 + 1.98688I$ $b = 1.18109 + 0.94964I$	$2.05671 - 4.61879I$	$-1.72164 + 0.99130I$
$u = -0.625537 + 0.127848I$ $a = 0.12337 - 2.08179I$ $b = -0.17077 - 1.57240I$	$3.37647 - 1.41965I$	$-6.14080 - 6.15322I$
$u = -0.625537 - 0.127848I$ $a = 0.12337 + 2.08179I$ $b = -0.17077 + 1.57240I$	$3.37647 + 1.41965I$	$-6.14080 + 6.15322I$
$u = -1.161250 + 0.781946I$ $a = -0.714807 + 0.479535I$ $b = 1.61962 + 1.15868I$	$0.75621 + 5.36777I$	0
$u = -1.161250 - 0.781946I$ $a = -0.714807 - 0.479535I$ $b = 1.61962 - 1.15868I$	$0.75621 - 5.36777I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.30967+0.55909I$ $a=\ \ 0.254406+0.668630I$ $b=-0.088899+0.527247I$	$-4.11139+0.22883I$	0
$u=-1.30967-0.55909I$ $a=\ \ 0.254406-0.668630I$ $b=-0.088899-0.527247I$	$-4.11139-0.22883I$	0
$u=\ \ 0.568954+0.051702I$ $a=-0.010636+0.939943I$ $b=-2.60576-0.00022I$	$-3.29751+5.91017I$	$-8.26846+1.15510I$
$u=\ \ 0.568954-0.051702I$ $a=-0.010636-0.939943I$ $b=-2.60576+0.00022I$	$-3.29751-5.91017I$	$-8.26846-1.15510I$
$u=\ \ 1.42208+0.23628I$ $a=-0.205088+0.391811I$ $b=\ \ 0.097993-0.452119I$	$-7.70780-4.93574I$	0
$u=\ \ 1.42208-0.23628I$ $a=-0.205088-0.391811I$ $b=\ \ 0.097993+0.452119I$	$-7.70780+4.93574I$	0
$u=-1.28561+0.68101I$ $a=\ \ 0.853011-0.554546I$ $b=-1.91955-1.09572I$	$-3.5615+18.3556I$	0
$u=-1.28561-0.68101I$ $a=\ \ 0.853011+0.554546I$ $b=-1.91955+1.09572I$	$-3.5615-18.3556I$	0
$u=-0.69776+1.28329I$ $a=\ \ 0.525833-0.411533I$ $b=-1.66462-0.25778I$	$2.46400+1.88919I$	0
$u=-0.69776-1.28329I$ $a=\ \ 0.525833+0.411533I$ $b=-1.66462+0.25778I$	$2.46400-1.88919I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.29542 + 0.68768I$ $a = -0.773963 - 0.522788I$ $b = 1.92236 - 0.96916I$	$1.07559 - 12.41720I$	0
$u = 1.29542 - 0.68768I$ $a = -0.773963 + 0.522788I$ $b = 1.92236 + 0.96916I$	$1.07559 + 12.41720I$	0
$u = -1.46675 + 0.10797I$ $a = 0.203099 + 0.476024I$ $b = -0.381772 + 0.176585I$	$-3.16691 - 0.95888I$	0
$u = -1.46675 - 0.10797I$ $a = 0.203099 - 0.476024I$ $b = -0.381772 - 0.176585I$	$-3.16691 + 0.95888I$	0
$u = 1.32817 + 0.64795I$ $a = 0.696162 + 0.676195I$ $b = -1.46478 + 1.19103I$	$-0.82407 - 8.70596I$	0
$u = 1.32817 - 0.64795I$ $a = 0.696162 - 0.676195I$ $b = -1.46478 - 1.19103I$	$-0.82407 + 8.70596I$	0
$u = -1.27034 + 0.79509I$ $a = 0.711267 - 0.317864I$ $b = -1.80415 - 0.71320I$	$-3.38380 + 5.47099I$	0
$u = -1.27034 - 0.79509I$ $a = 0.711267 + 0.317864I$ $b = -1.80415 + 0.71320I$	$-3.38380 - 5.47099I$	0
$u = 0.222265 + 0.414714I$ $a = 0.18402 - 1.79342I$ $b = 0.512831 + 0.591648I$	$-3.77648 + 1.13028I$	$-11.93912 - 1.05833I$
$u = 0.222265 - 0.414714I$ $a = 0.18402 + 1.79342I$ $b = 0.512831 - 0.591648I$	$-3.77648 - 1.13028I$	$-11.93912 + 1.05833I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 1.60795 + 0.13510I$ $a = -0.206613 + 0.492939I$ $b = -0.087635 + 0.380931I$	$-7.53811 + 6.57319I$	0
$u = \quad 1.60795 - 0.13510I$ $a = -0.206613 - 0.492939I$ $b = -0.087635 - 0.380931I$	$-7.53811 - 6.57319I$	0
$u = -0.273696$ $a = -1.49428$ $b = -0.344561$	-0.749139	-13.7710

II. $\boldsymbol{I_2^u = \langle 4.26\times 10^5 u^{22} + 8.07\times 10^5 u^{21} + \cdots + 7.57\times 10^4 b - 8.68\times 10^5,\ 6.38\times 10^5 u^{22} + 1.11\times 10^6 u^{21} + \cdots + 7.57\times 10^4 a - 1.83\times 10^6,\ u^{23} + u^{22} + \cdots - u + 1\rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -8.43110u^{22} - 14.7236u^{21} + \cdots + 9.55038u + 24.1249 \\ -5.62706u^{22} - 10.6647u^{21} + \cdots - 1.67146u + 11.4750 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -11.9377u^{22} - 20.9171u^{21} + \cdots + 11.9498u + 34.1380 \\ -2.48312u^{22} - 5.36672u^{21} + \cdots - 3.25115u + 4.14875 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -10.8301u^{22} - 20.1771u^{21} + \cdots - 17.1024u + 13.9789 \\ -2.88013u^{22} - 4.50412u^{21} + \cdots + 2.39475u + 7.91648 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 16.4908u^{22} + 24.5150u^{21} + \cdots - 28.5754u - 38.5222 \\ -13.8335u^{22} - 22.6391u^{21} + \cdots + 2.11152u + 18.2975 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -13.7103u^{22} - 24.6813u^{21} + \cdots - 14.7077u + 21.8954 \\ -2.88013u^{22} - 4.50412u^{21} + \cdots + 2.39475u + 7.91648 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -8.39680u^{22} - 18.0128u^{21} + \cdots - 16.8915u + 13.5888 \\ -6.32147u^{22} - 9.13635u^{21} + \cdots + 11.4126u + 15.3347 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 22.4258u^{22} + 36.9455u^{21} + \cdots - 13.6351u - 40.7200 \\ 6.19350u^{22} + 9.24305u^{21} + \cdots - 8.90597u - 13.5198 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 22.4258u^{22} + 36.9455u^{21} + \cdots - 13.6351u - 40.7200 \\ 6.19350u^{22} + 9.24305u^{21} + \cdots - 8.90597u - 13.5198 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{3714020}{75671}u^{22} - \frac{4573163}{75671}u^{21} + \cdots + \frac{7421079}{75671}u + \frac{5642156}{75671}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{23}+2u^{21}+\cdots+15u+7$
c_2	$u^{23}-8u^{22}+\cdots+4u-1$
c_3	$u^{23}+3u^{22}+\cdots+4u+1$
c_4	$u^{23}+6u^{20}+\cdots+3u-7$
c_5	$u^{23}+8u^{22}+\cdots+4u+1$
c_6	$u^{23}-u^{22}+\cdots-u-1$
c_7	$u^{23}-u^{21}+\cdots+4u-1$
c_8	$u^{23}+2u^{22}+\cdots-6u-1$
c_9	$u^{23}+u^{22}+\cdots-u+1$
c_{10}	$u^{23}+u^{22}+\cdots+u^2-1$
c_{11}	$u^{23}-2u^{22}+\cdots-6u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{23} + 4y^{22} + \cdots - 55y - 49$
c_2, c_5	$y^{23} + 12y^{22} + \cdots - 20y - 1$
c_3	$y^{23} - 9y^{22} + \cdots - 6y - 1$
c_4	$y^{23} + 6y^{21} + \cdots + 191y - 49$
c_6, c_9	$y^{23} - 13y^{22} + \cdots + 19y - 1$
c_7	$y^{23} - 2y^{22} + \cdots + 20y - 1$
c_8, c_{11}	$y^{23} + 18y^{22} + \cdots + 2y - 1$
c_{10}	$y^{23} - 11y^{22} + \cdots + 2y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.943434 + 0.263211I$ $a = 1.43599 - 0.63189I$ $b = -0.363534 + 0.388836I$	$-6.19249 - 1.08021I$	$-7.69289 + 6.14791I$
$u = 0.943434 - 0.263211I$ $a = 1.43599 + 0.63189I$ $b = -0.363534 - 0.388836I$	$-6.19249 + 1.08021I$	$-7.69289 - 6.14791I$
$u = -0.940585 + 0.485041I$ $a = 0.394246 - 0.629144I$ $b = -1.94942 + 0.19915I$	$1.08785 + 2.06017I$	$-3.20695 - 2.61947I$
$u = -0.940585 - 0.485041I$ $a = 0.394246 + 0.629144I$ $b = -1.94942 - 0.19915I$	$1.08785 - 2.06017I$	$-3.20695 + 2.61947I$
$u = -0.327032 + 1.095140I$ $a = -0.978412 + 0.127508I$ $b = 1.47458 + 0.55621I$	$3.01480 + 3.49113I$	$-0.56270 - 8.28702I$
$u = -0.327032 - 1.095140I$ $a = -0.978412 - 0.127508I$ $b = 1.47458 - 0.55621I$	$3.01480 - 3.49113I$	$-0.56270 + 8.28702I$
$u = -1.15270$ $a = -0.675521$ $b = 0.483652$	-3.56069	-10.8570
$u = -0.565856 + 1.036780I$ $a = 0.517614 - 0.406082I$ $b = -1.86373 - 0.43547I$	$1.64013 + 2.16694I$	$-5.84411 + 2.66864I$
$u = -0.565856 - 1.036780I$ $a = 0.517614 + 0.406082I$ $b = -1.86373 + 0.43547I$	$1.64013 - 2.16694I$	$-5.84411 - 2.66864I$
$u = -1.208660 + 0.351445I$ $a = -0.456152 - 0.650182I$ $b = 0.228499 - 0.262781I$	$-3.85538 - 0.13822I$	$-11.25047 + 3.93197I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.208660-0.351445I$ $a=-0.456152+0.650182I$ $b=\ \ 0.228499+0.262781I$	$-3.85538+0.13822I$	$-11.25047-3.93197I$
$u=-1.077960+0.700882I$ $a=-0.894195+0.337719I$ $b=\ \ 1.64141+0.57971I$	$-2.85361+5.57806I$	$-8.34402-8.14975I$
$u=-1.077960-0.700882I$ $a=-0.894195-0.337719I$ $b=\ \ 1.64141-0.57971I$	$-2.85361-5.57806I$	$-8.34402+8.14975I$
$u=\ \ 1.201160+0.497784I$ $a=\ \ 0.797343+0.825084I$ $b=-1.60073+0.96244I$	$-1.65661-8.03479I$	$-10.73175+6.86683I$
$u=\ \ 1.201160-0.497784I$ $a=\ \ 0.797343-0.825084I$ $b=-1.60073-0.96244I$	$-1.65661+8.03479I$	$-10.73175-6.86683I$
$u=\ \ 0.616353+0.221590I$ $a=-0.828049-0.644929I$ $b=\ \ 2.69422-0.33627I$	$-3.39178-6.41701I$	$-11.3847+13.7261I$
$u=\ \ 0.616353-0.221590I$ $a=-0.828049+0.644929I$ $b=\ \ 2.69422+0.33627I$	$-3.39178+6.41701I$	$-11.3847-13.7261I$
$u=-0.565804+0.138948I$ $a=-0.66175+2.10895I$ $b=-0.275737+1.340270I$	$3.40764+1.98502I$	$-5.23404-6.40618I$
$u=-0.565804-0.138948I$ $a=-0.66175-2.10895I$ $b=-0.275737-1.340270I$	$3.40764-1.98502I$	$-5.23404+6.40618I$
$u=\ \ 0.552708+0.145534I$ $a=-0.42634-2.64226I$ $b=\ \ 0.940571-0.482858I$	$1.36627+4.91196I$	$-10.94228-4.46028I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.552708 - 0.145534I$		
$a = -0.42634 + 2.64226I$	$1.36627 - 4.91196I$	$-10.94228 + 4.46028I$
$b = \quad 0.940571 + 0.482858I$		
$u = \quad 1.44859 + 0.07041I$		
$a = -0.062533 - 0.290866I$	$-7.23583 - 5.57214I$	$-8.37775 + 4.83062I$
$b = -0.667953 - 0.088864I$		
$u = \quad 1.44859 - 0.07041I$		
$a = -0.062533 + 0.290866I$	$-7.23583 + 5.57214I$	$-8.37775 - 4.83062I$
$b = -0.667953 + 0.088864I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{23}+2u^{21}+\cdots+15u+7)(u^{103}+u^{102}+\cdots-35693u+3817)$
c_2	$(u^{23}-8u^{22}+\cdots+4u-1)(u^{103}+7u^{102}+\cdots-488u+403)$
c_3	$(u^{23}+3u^{22}+\cdots+4u+1)(u^{103}-8u^{102}+\cdots-52u+8)$
c_4	$(u^{23}+6u^{20}+\cdots+3u-7)(u^{103}-u^{102}+\cdots+257024u+34816)$
c_5	$(u^{23}+8u^{22}+\cdots+4u+1)(u^{103}+7u^{102}+\cdots-488u+403)$
c_6	$(u^{23}-u^{22}+\cdots-u-1)(u^{103}+4u^{102}+\cdots+469u+109)$
c_7	$(u^{23}-u^{21}+\cdots+4u-1)(u^{103}-u^{102}+\cdots-6340u+2537)$
c_8	$(u^{23}+2u^{22}+\cdots-6u-1)(u^{103}+5u^{102}+\cdots+44u+1)$
c_9	$(u^{23}+u^{22}+\cdots-u+1)(u^{103}+4u^{102}+\cdots+469u+109)$
c_{10}	$(u^{23}+u^{22}+\cdots+u^2-1)(u^{103}+2u^{102}+\cdots+366u+343)$
c_{11}	$(u^{23}-2u^{22}+\cdots-6u+1)(u^{103}+5u^{102}+\cdots+44u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{23}+4y^{22}+\cdots-55y-49)$ $\cdot(y^{103}+17y^{102}+\cdots-648571579y-14569489)$
c_2, c_5	$(y^{23}+12y^{22}+\cdots-20y-1)$ $\cdot(y^{103}+53y^{102}+\cdots-6001908y-162409)$
c_3	$(y^{23}-9y^{22}+\cdots-6y-1)(y^{103}-16y^{102}+\cdots+1424y-64)$
c_4	$(y^{23}+6y^{21}+\cdots+191y-49)$ $\cdot(y^{103}-23y^{102}+\cdots-61678288896y-1212153856)$
c_6, c_9	$(y^{23}-13y^{22}+\cdots+19y-1)(y^{103}-56y^{102}+\cdots+439051y-11881)$
c_7	$(y^{23}-2y^{22}+\cdots+20y-1)$ $\cdot(y^{103}-17y^{102}+\cdots+318453760y-6436369)$
c_8, c_{11}	$(y^{23}+18y^{22}+\cdots+2y-1)(y^{103}+75y^{102}+\cdots+218y-1)$
c_{10}	$(y^{23}-11y^{22}+\cdots+2y-1)(y^{103}-22y^{102}+\cdots-423762y-117649)$