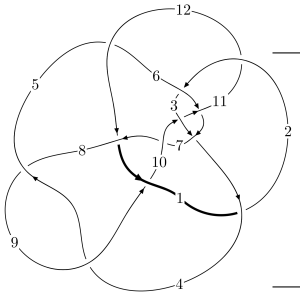
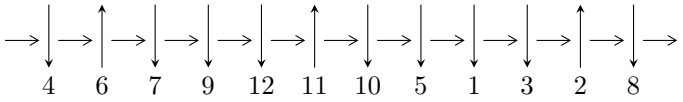
$12a_{0875}$ $(K12a_{0875})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 6.06777 \times 10^{2287} u^{207} + 3.61028 \times 10^{2288} u^{206} + \cdots + 1.17143 \times 10^{2289} b + 1.76103 \times 10^{2290}, \\ & 6.76654 \times 10^{2290} u^{207} + 3.03190 \times 10^{2291} u^{206} + \cdots + 2.49514 \times 10^{2291} a - 2.01871 \times 10^{2293}, \\ & u^{208} + 5u^{207} + \cdots - 270u + 71 \rangle \\ I_2^u = \langle & -6.52040 \times 10^{155} u^{54} + 2.64905 \times 10^{155} u^{53} + \cdots + 2.94871 \times 10^{154} b + 1.64262 \times 10^{156}, \\ & -1.25518 \times 10^{154} u^{54} + 1.73289 \times 10^{153} u^{53} + \cdots + 7.37178 \times 10^{153} a + 3.32900 \times 10^{154}, \\ & u^{55} + 5u^{53} + \cdots - 3u - 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 263 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. $\boldsymbol{I_1^u = \langle 6.07 \times 10^{2287} u^{207} + 3.61 \times 10^{2288} u^{206} + \cdots + 1.17 \times 10^{2289} b + 1.76 \times 10^{2290},\ 6.77 \times 10^{2290} u^{207} + 3.03 \times 10^{2291} u^{206} + \cdots + 2.50 \times 10^{2291} a - 2.02 \times 10^{2293},\ u^{208} + 5u^{207} + \cdots - 270u + 71 \rangle}$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -0.271189u^{207} - 1.21512u^{206} + \cdots - 295.757u + 80.9057 \\ -0.0517981u^{207} - 0.308195u^{206} + \cdots + 12.4371u - 15.0332 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -0.306500u^{207} - 1.33748u^{206} + \cdots - 365.471u + 105.937 \\ -0.0702218u^{207} - 0.393730u^{206} + \cdots - 4.70511u - 11.1847 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.219391u^{207} - 0.906926u^{206} + \cdots - 308.194u + 95.9389 \\ -0.0517981u^{207} - 0.308195u^{206} + \cdots + 12.4371u - 15.0332 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 0.0132353u^{207} - 0.251612u^{206} + \cdots + 298.116u - 109.515 \\ 0.0937300u^{207} + 0.443849u^{206} + \cdots + 65.3771u - 16.9739 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.307575u^{207} + 1.87506u^{206} + \cdots - 110.451u + 95.2013 \\ -0.0769964u^{207} - 0.408007u^{206} + \cdots - 28.1984u - 2.46309 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.963256u^{207} - 4.91658u^{206} + \cdots - 446.134u + 40.5809 \\ -0.000938071u^{207} - 0.0622435u^{206} + \cdots + 47.8483u - 13.9887 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.212609u^{207} + 0.716181u^{206} + \cdots + 422.650u - 137.880 \\ 0.105644u^{207} + 0.523944u^{206} + \cdots + 61.1564u - 11.3908 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.951459u^{207} - 4.50288u^{206} + \cdots - 779.687u + 177.789 \\ -0.158656u^{207} - 0.851879u^{206} + \cdots - 37.0374u - 8.00512 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.122204u^{207} - 0.900823u^{206} + \cdots + 214.491u - 87.1759 \\ -0.0344334u^{207} - 0.214756u^{206} + \cdots + 3.89841u - 13.7835 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.744049u^{207} + 3.94358u^{206} + \cdots + 221.161u + 23.8828$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{208}+4u^{207}+\cdots-224906561670u-63352175999$
c_2	$u^{208}-5u^{207}+\cdots-237737u+17081$
c_3	$u^{208}-4u^{207}+\cdots+28u-1$
c_4, c_8	$u^{208}+3u^{207}+\cdots+2214u-83$
c_5	$u^{208}-u^{207}+\cdots-431064724298593u+90684077361587$
c_6	$u^{208}-5u^{207}+\cdots+270u+71$
c_7	$u^{208}-18u^{207}+\cdots-8169806861101u+531367876849$
c_9	$u^{208}+33u^{206}+\cdots+36106632u+12489409$
c_{10}	$u^{208}+u^{207}+\cdots+147178u-2621$
c_{11}	$u^{208}-7u^{207}+\cdots+5619u+531$
c_{12}	$u^{208}-2u^{207}+\cdots-838743923703u+62461848131$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{208} + 72y^{207} + \cdots + 2.81 \times 10^{23}y + 4.01 \times 10^{21}$
c_2	$y^{208} - 7y^{207} + \cdots + 22229892265y + 291760561$
c_3	$y^{208} + 12y^{207} + \cdots + 542y + 1$
c_4, c_8	$y^{208} + 145y^{207} + \cdots - 1270546y + 6889$
c_5	$y^{208} + 117y^{207} + \cdots + 1.95 \times 10^{29}y + 8.22 \times 10^{27}$
c_6	$y^{208} + 25y^{207} + \cdots + 90684y + 5041$
c_7	$y^{208} + 74y^{207} + \cdots + 2.40 \times 10^{25}y + 2.82 \times 10^{23}$
c_9	$y^{208} + 66y^{207} + \cdots + 6452214131562176y + 155985337169281$
c_{10}	$y^{208} + 19y^{207} + \cdots - 5108039792y + 6869641$
c_{11}	$y^{208} - 17y^{207} + \cdots - 28051569y + 281961$
c_{12}	$y^{208} + 92y^{207} + \cdots + 9.60 \times 10^{22}y + 3.90 \times 10^{21}$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.490036+0.888502I$ $a=-0.067538-0.664674I$ $b=-0.748604-0.877003I$	$2.14080-6.87743I$	0
$u=-0.490036-0.888502I$ $a=-0.067538+0.664674I$ $b=-0.748604+0.877003I$	$2.14080+6.87743I$	0
$u=-0.167710+1.009850I$ $a=-0.329906+0.988249I$ $b=-0.830859+0.900686I$	$-0.24518-2.85387I$	0
$u=-0.167710-1.009850I$ $a=-0.329906-0.988249I$ $b=-0.830859-0.900686I$	$-0.24518+2.85387I$	0
$u=0.720227+0.728197I$ $a=0.14640+1.56590I$ $b=1.28606+1.01520I$	$9.52852-2.95814I$	0
$u=0.720227-0.728197I$ $a=0.14640-1.56590I$ $b=1.28606-1.01520I$	$9.52852+2.95814I$	0
$u=0.908178+0.338881I$ $a=-0.163717+0.670917I$ $b=-0.16466+1.66125I$	$2.32181-2.17308I$	0
$u=0.908178-0.338881I$ $a=-0.163717-0.670917I$ $b=-0.16466-1.66125I$	$2.32181+2.17308I$	0
$u=0.920466+0.488367I$ $a=0.260479+0.773685I$ $b=1.30023+0.87304I$	$9.49403+0.39916I$	0
$u=0.920466-0.488367I$ $a=0.260479-0.773685I$ $b=1.30023-0.87304I$	$9.49403-0.39916I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.666024 + 0.817613I$ $a = 0.279726 - 1.050840I$ $b = -0.991626 - 0.894840I$	$0.21931 + 3.76143I$	0
$u = 0.666024 - 0.817613I$ $a = 0.279726 + 1.050840I$ $b = -0.991626 + 0.894840I$	$0.21931 - 3.76143I$	0
$u = -0.934356 + 0.132049I$ $a = -0.595125 - 0.879875I$ $b = 0.125705 - 0.419432I$	$4.35527 - 1.06386I$	0
$u = -0.934356 - 0.132049I$ $a = -0.595125 + 0.879875I$ $b = 0.125705 + 0.419432I$	$4.35527 + 1.06386I$	0
$u = 0.685944 + 0.641700I$ $a = 0.388474 - 0.461928I$ $b = 0.933380 - 0.493752I$	$-2.18923 + 0.53636I$	0
$u = 0.685944 - 0.641700I$ $a = 0.388474 + 0.461928I$ $b = 0.933380 + 0.493752I$	$-2.18923 - 0.53636I$	0
$u = -0.450323 + 0.960878I$ $a = -1.071790 + 0.269758I$ $b = -1.107660 - 0.127328I$	$4.15701 - 2.45008I$	0
$u = -0.450323 - 0.960878I$ $a = -1.071790 - 0.269758I$ $b = -1.107660 + 0.127328I$	$4.15701 + 2.45008I$	0
$u = 0.955734 + 0.472949I$ $a = 0.238405 + 0.662428I$ $b = 1.34719 + 1.09163I$	$9.1496 + 12.4686I$	0
$u = 0.955734 - 0.472949I$ $a = 0.238405 - 0.662428I$ $b = 1.34719 - 1.09163I$	$9.1496 - 12.4686I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.958852+0.480402I$ $a=-0.279381+0.693940I$ $b=-1.26562+1.02385I$	$4.73934-6.47502I$	0
$u=-0.958852-0.480402I$ $a=-0.279381-0.693940I$ $b=-1.26562-1.02385I$	$4.73934+6.47502I$	0
$u=0.279943+1.038960I$ $a=-1.224420-0.679613I$ $b=-0.375080-0.044216I$	$0.03106+1.89495I$	0
$u=0.279943-1.038960I$ $a=-1.224420+0.679613I$ $b=-0.375080+0.044216I$	$0.03106-1.89495I$	0
$u=0.956683+0.495100I$ $a=0.24086-1.42757I$ $b=-0.960696-0.081886I$	$8.59019+1.80950I$	0
$u=0.956683-0.495100I$ $a=0.24086+1.42757I$ $b=-0.960696+0.081886I$	$8.59019-1.80950I$	0
$u=-1.076570+0.065255I$ $a=0.112673-0.861681I$ $b=0.889575+0.111250I$	$6.59679+4.86101I$	0
$u=-1.076570-0.065255I$ $a=0.112673+0.861681I$ $b=0.889575-0.111250I$	$6.59679-4.86101I$	0
$u=0.510579+0.767036I$ $a=1.348600-0.321286I$ $b=-0.281793-0.737288I$	$1.10117+6.37333I$	0
$u=0.510579-0.767036I$ $a=1.348600+0.321286I$ $b=-0.281793+0.737288I$	$1.10117-6.37333I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.251496 + 1.058710I$ $a = 0.343330 + 0.971089I$ $b = 0.272415 + 1.092500I$	$-0.224687 + 0.939698I$	0
$u = 0.251496 - 1.058710I$ $a = 0.343330 - 0.971089I$ $b = 0.272415 - 1.092500I$	$-0.224687 - 0.939698I$	0
$u = -0.634885 + 0.886009I$ $a = -0.201387 + 0.775869I$ $b = -0.715628 + 0.790856I$	$-0.29766 - 2.30913I$	0
$u = -0.634885 - 0.886009I$ $a = -0.201387 - 0.775869I$ $b = -0.715628 - 0.790856I$	$-0.29766 + 2.30913I$	0
$u = 1.09390$ $a = 0.0326255$ $b = 0.495384$	-1.42197	0
$u = -1.006780 + 0.437503I$ $a = 0.46419 + 1.46818I$ $b = -0.785589 + 0.015168I$	$9.2221 - 12.0084I$	0
$u = -1.006780 - 0.437503I$ $a = 0.46419 - 1.46818I$ $b = -0.785589 - 0.015168I$	$9.2221 + 12.0084I$	0
$u = 0.034802 + 0.898391I$ $a = -0.479397 + 1.024510I$ $b = 0.181228 + 0.997343I$	$-0.857062 - 0.663962I$	0
$u = 0.034802 - 0.898391I$ $a = -0.479397 - 1.024510I$ $b = 0.181228 - 0.997343I$	$-0.857062 + 0.663962I$	0
$u = -0.760167 + 0.811712I$ $a = -0.248572 + 1.386600I$ $b = -1.24412 + 1.05435I$	$4.67222 - 2.63901I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.760167-0.811712I$ $a=-0.248572-1.386600I$ $b=-1.24412-1.05435I$	$4.67222+2.63901I$	0
$u=-0.322616+0.819234I$ $a=-1.135570-0.470921I$ $b=\ \ 0.207383-0.437091I$	$-1.52205-2.84319I$	0
$u=-0.322616-0.819234I$ $a=-1.135570+0.470921I$ $b=\ \ 0.207383+0.437091I$	$-1.52205+2.84319I$	0
$u=\ \ 0.001055+1.131390I$ $a=\ \ 0.309035-0.129562I$ $b=\ \ 1.407290-0.107413I$	$0.35368-3.26470I$	0
$u=\ \ 0.001055-1.131390I$ $a=\ \ 0.309035+0.129562I$ $b=\ \ 1.407290+0.107413I$	$0.35368+3.26470I$	0
$u=-0.987048+0.555354I$ $a=-0.096149-1.214160I$ $b=\ \ 0.660653-0.144180I$	$4.21577-2.35889I$	0
$u=-0.987048-0.555354I$ $a=-0.096149+1.214160I$ $b=\ \ 0.660653+0.144180I$	$4.21577+2.35889I$	0
$u=\ \ 0.335174+1.091200I$ $a=\ \ 1.196790+0.090457I$ $b=\ \ 1.316280-0.336316I$	$8.45119+7.49039I$	0
$u=\ \ 0.335174-1.091200I$ $a=\ \ 1.196790-0.090457I$ $b=\ \ 1.316280+0.336316I$	$8.45119-7.49039I$	0
$u=\ \ 0.753959+0.399011I$ $a=-0.39346+2.19322I$ $b=\ \ 0.545718+0.048230I$	$3.50643+6.88270I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.753959 - 0.399011I$ $a = -0.39346 - 2.19322I$ $b = 0.545718 - 0.048230I$	$3.50643 - 6.88270I$	0
$u = 0.839557 + 0.786589I$ $a = 0.126027 + 1.249320I$ $b = 1.23648 + 1.13360I$	$8.67440 + 8.88883I$	0
$u = 0.839557 - 0.786589I$ $a = 0.126027 - 1.249320I$ $b = 1.23648 - 1.13360I$	$8.67440 - 8.88883I$	0
$u = 0.610053 + 0.573893I$ $a = 0.26409 - 1.88618I$ $b = -0.671153 - 0.984707I$	$1.99548 + 5.26676I$	0
$u = 0.610053 - 0.573893I$ $a = 0.26409 + 1.88618I$ $b = -0.671153 + 0.984707I$	$1.99548 - 5.26676I$	0
$u = 0.588268 + 1.005260I$ $a = 0.535372 + 1.138270I$ $b = 0.535347 + 0.950288I$	$1.66225 + 5.65430I$	0
$u = 0.588268 - 1.005260I$ $a = 0.535372 - 1.138270I$ $b = 0.535347 - 0.950288I$	$1.66225 - 5.65430I$	0
$u = 0.833640$ $a = -1.47003$ $b = 0.440138$	-2.36101	0
$u = -0.788240 + 0.070425I$ $a = 2.27239 - 1.04174I$ $b = -0.488122 + 0.286684I$	$6.66455 - 0.89858I$	0
$u = -0.788240 - 0.070425I$ $a = 2.27239 + 1.04174I$ $b = -0.488122 - 0.286684I$	$6.66455 + 0.89858I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.505317 + 0.601031I$ $a = 0.68165 + 1.31058I$ $b = -0.348293 + 0.526878I$	$2.39199 + 5.41873I$	0
$u = 0.505317 - 0.601031I$ $a = 0.68165 - 1.31058I$ $b = -0.348293 - 0.526878I$	$2.39199 - 5.41873I$	0
$u = -0.917187 + 0.806590I$ $a = -0.013319 - 1.318720I$ $b = 1.26174 - 0.75571I$	$8.20874 - 7.09364I$	0
$u = -0.917187 - 0.806590I$ $a = -0.013319 + 1.318720I$ $b = 1.26174 + 0.75571I$	$8.20874 + 7.09364I$	0
$u = 0.727600 + 0.239522I$ $a = -0.297999 - 0.481961I$ $b = -1.36503 - 1.35330I$	$2.47864 + 1.84957I$	0
$u = 0.727600 - 0.239522I$ $a = -0.297999 + 0.481961I$ $b = -1.36503 + 1.35330I$	$2.47864 - 1.84957I$	0
$u = 0.585599 + 0.484662I$ $a = -0.880305 - 0.819363I$ $b = -1.048100 + 0.194585I$	$3.29438 - 2.62542I$	0
$u = 0.585599 - 0.484662I$ $a = -0.880305 + 0.819363I$ $b = -1.048100 - 0.194585I$	$3.29438 + 2.62542I$	0
$u = 0.792366 + 0.954048I$ $a = -0.257956 + 0.535594I$ $b = 0.539296 + 0.485467I$	$-1.71003 - 0.56197I$	0
$u = 0.792366 - 0.954048I$ $a = -0.257956 - 0.535594I$ $b = 0.539296 - 0.485467I$	$-1.71003 + 0.56197I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.056105+0.736155I$ $a=-0.33016+2.17285I$ $b=-0.16628+2.10950I$	$-1.45182-2.34516I$	0
$u=-0.056105-0.736155I$ $a=-0.33016-2.17285I$ $b=-0.16628-2.10950I$	$-1.45182+2.34516I$	0
$u=\ \ 0.103040+0.728326I$ $a=\ \ 0.20594-2.86218I$ $b=-0.34014-1.57280I$	$-1.44162+2.55621I$	0
$u=\ \ 0.103040-0.728326I$ $a=\ \ 0.20594+2.86218I$ $b=-0.34014+1.57280I$	$-1.44162-2.55621I$	0
$u=\ \ 0.084726+0.726909I$ $a=-0.568857+0.708820I$ $b=\ \ 0.234663+0.714828I$	$-0.977046-0.833776I$	0
$u=\ \ 0.084726-0.726909I$ $a=-0.568857-0.708820I$ $b=\ \ 0.234663-0.714828I$	$-0.977046+0.833776I$	0
$u=-0.265708+0.677503I$ $a=\ \ 0.26809-1.48313I$ $b=-0.55750-1.83799I$	$5.44247-13.00190I$	0
$u=-0.265708-0.677503I$ $a=\ \ 0.26809+1.48313I$ $b=-0.55750+1.83799I$	$5.44247+13.00190I$	0
$u=\ \ 0.697860+1.064880I$ $a=-0.449795-1.307640I$ $b=-1.37235-1.03012I$	$1.86973+7.76991I$	0
$u=\ \ 0.697860-1.064880I$ $a=-0.449795+1.307640I$ $b=-1.37235+1.03012I$	$1.86973-7.76991I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.373898+0.616899I$ $a=-1.001850-0.794768I$ $b=\ \ 1.053310-0.527244I$	$2.63147-4.73655I$	0
$u=-0.373898-0.616899I$ $a=-1.001850+0.794768I$ $b=\ \ 1.053310+0.527244I$	$2.63147+4.73655I$	0
$u=-1.246710+0.295968I$ $a=-0.587242-0.297143I$ $b=\ \ 0.666412+0.290499I$	$5.52180+1.33719I$	0
$u=-1.246710-0.295968I$ $a=-0.587242+0.297143I$ $b=\ \ 0.666412-0.290499I$	$5.52180-1.33719I$	0
$u=\ \ 0.583987+1.146500I$ $a=\ \ 0.893842+0.087934I$ $b=\ \ 0.823658-0.321681I$	$7.60623-3.17715I$	0
$u=\ \ 0.583987-1.146500I$ $a=\ \ 0.893842-0.087934I$ $b=\ \ 0.823658+0.321681I$	$7.60623+3.17715I$	0
$u=-0.455288+0.546848I$ $a=-0.163878-1.397110I$ $b=-0.44863-1.60101I$	$5.53424-1.55481I$	0
$u=-0.455288-0.546848I$ $a=-0.163878+1.397110I$ $b=-0.44863+1.60101I$	$5.53424+1.55481I$	0
$u=\ \ 0.278648+0.633329I$ $a=-1.86633+2.02851I$ $b=\ \ 0.609350+0.916151I$	$5.6520+13.0394I$	0
$u=\ \ 0.278648-0.633329I$ $a=-1.86633-2.02851I$ $b=\ \ 0.609350-0.916151I$	$5.6520-13.0394I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.357734 + 0.591772I$ $a = 1.19553 - 1.07447I$ $b = -0.764706 - 0.790823I$	$0.06058 + 3.27739I$	0
$u = 0.357734 - 0.591772I$ $a = 1.19553 + 1.07447I$ $b = -0.764706 + 0.790823I$	$0.06058 - 3.27739I$	0
$u = -0.032701 + 0.678660I$ $a = -1.41686 + 1.49315I$ $b = 0.178703 + 0.889705I$	$-1.55936 - 4.02391I$	0
$u = -0.032701 - 0.678660I$ $a = -1.41686 - 1.49315I$ $b = 0.178703 - 0.889705I$	$-1.55936 + 4.02391I$	0
$u = -0.696822 + 1.139110I$ $a = -0.461486 + 1.013920I$ $b = -0.829066 + 1.025210I$	$1.50491 - 5.99760I$	0
$u = -0.696822 - 1.139110I$ $a = -0.461486 - 1.013920I$ $b = -0.829066 - 1.025210I$	$1.50491 + 5.99760I$	0
$u = 0.287092 + 0.596168I$ $a = -0.13769 - 1.62532I$ $b = 0.56834 - 1.74941I$	$1.09443 + 7.31657I$	0
$u = 0.287092 - 0.596168I$ $a = -0.13769 + 1.62532I$ $b = 0.56834 + 1.74941I$	$1.09443 - 7.31657I$	0
$u = -0.180139 + 0.619365I$ $a = 1.67141 + 2.62068I$ $b = -0.470445 + 0.871413I$	$0.91074 - 6.83141I$	0
$u = -0.180139 - 0.619365I$ $a = 1.67141 - 2.62068I$ $b = -0.470445 - 0.871413I$	$0.91074 + 6.83141I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.111466 + 0.634591I$ $a = 0.563157 - 1.204150I$ $b = -1.01747 - 1.01104I$	$-1.37241 + 4.39659I$	0
$u = 0.111466 - 0.634591I$ $a = 0.563157 + 1.204150I$ $b = -1.01747 + 1.01104I$	$-1.37241 - 4.39659I$	0
$u = -0.704274 + 1.194610I$ $a = 0.176959 - 0.825287I$ $b = 1.30311 - 0.75041I$	$2.37418 - 7.01546I$	0
$u = -0.704274 - 1.194610I$ $a = 0.176959 + 0.825287I$ $b = 1.30311 + 0.75041I$	$2.37418 + 7.01546I$	0
$u = -1.217330 + 0.665216I$ $a = 0.665411 + 0.620345I$ $b = -0.849094 + 0.441203I$	$4.19847 + 1.41965I$	0
$u = -1.217330 - 0.665216I$ $a = 0.665411 - 0.620345I$ $b = -0.849094 - 0.441203I$	$4.19847 - 1.41965I$	0
$u = 0.992062 + 0.971135I$ $a = -0.346659 + 1.104750I$ $b = 0.869217 + 0.764195I$	$-2.46784 + 5.86562I$	0
$u = 0.992062 - 0.971135I$ $a = -0.346659 - 1.104750I$ $b = 0.869217 - 0.764195I$	$-2.46784 - 5.86562I$	0
$u = -0.201161 + 0.558970I$ $a = -0.69533 + 1.49684I$ $b = 0.49312 + 1.37303I$	$0.26561 - 2.48821I$	0
$u = -0.201161 - 0.558970I$ $a = -0.69533 - 1.49684I$ $b = 0.49312 - 1.37303I$	$0.26561 + 2.48821I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.26818 + 0.63384I$ $a = 0.030690 - 0.886462I$ $b = -0.589373 + 0.010830I$	$6.85361 + 2.07412I$	0
$u = 1.26818 - 0.63384I$ $a = 0.030690 + 0.886462I$ $b = -0.589373 - 0.010830I$	$6.85361 - 2.07412I$	0
$u = -0.109070 + 0.563630I$ $a = 0.324813 + 1.152950I$ $b = -0.42923 + 2.56756I$	$4.00486 + 1.60025I$	0
$u = -0.109070 - 0.563630I$ $a = 0.324813 - 1.152950I$ $b = -0.42923 - 2.56756I$	$4.00486 - 1.60025I$	0
$u = -0.81272 + 1.17195I$ $a = -0.187853 + 0.864331I$ $b = -0.887265 + 0.937159I$	$-1.73800 - 2.59027I$	0
$u = -0.81272 - 1.17195I$ $a = -0.187853 - 0.864331I$ $b = -0.887265 - 0.937159I$	$-1.73800 + 2.59027I$	0
$u = -0.278492 + 0.488235I$ $a = 2.24968 - 2.23535I$ $b = 0.400609 + 0.250915I$	$4.72780 + 2.63606I$	0
$u = -0.278492 - 0.488235I$ $a = 2.24968 + 2.23535I$ $b = 0.400609 - 0.250915I$	$4.72780 - 2.63606I$	0
$u = -0.81602 + 1.20203I$ $a = 0.498349 - 0.241544I$ $b = 1.003060 + 0.382288I$	$7.14816 + 0.60925I$	0
$u = -0.81602 - 1.20203I$ $a = 0.498349 + 0.241544I$ $b = 1.003060 - 0.382288I$	$7.14816 - 0.60925I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.29037+0.67743I$ $a=\ \ 0.146015-0.401733I$ $b=\ \ 1.104320-0.535379I$	$7.33376-2.50145I$	0
$u=-1.29037-0.67743I$ $a=\ \ 0.146015+0.401733I$ $b=\ \ 1.104320+0.535379I$	$7.33376+2.50145I$	0
$u=-0.371850+0.393899I$ $a=-3.30940-1.26353I$ $b=\ \ 0.440762-0.819974I$	$5.01602-3.44162I$	0
$u=-0.371850-0.393899I$ $a=-3.30940+1.26353I$ $b=\ \ 0.440762+0.819974I$	$5.01602+3.44162I$	0
$u=\ \ 0.044558+0.539268I$ $a=\ \ 1.58835+2.35236I$ $b=-0.214310+0.642628I$	$-3.58918+0.33486I$	0
$u=\ \ 0.044558-0.539268I$ $a=\ \ 1.58835-2.35236I$ $b=-0.214310-0.642628I$	$-3.58918-0.33486I$	0
$u=\ \ 0.108428+0.527171I$ $a=-0.08599-1.48073I$ $b=\ \ 1.01066-1.05105I$	$-3.51853+0.46972I$	0
$u=\ \ 0.108428-0.527171I$ $a=-0.08599+1.48073I$ $b=\ \ 1.01066+1.05105I$	$-3.51853-0.46972I$	0
$u=\ \ 0.91949+1.13759I$ $a=\ \ 0.099745+0.947443I$ $b=\ \ 0.961509+0.862525I$	$-3.47428+7.21832I$	0
$u=\ \ 0.91949-1.13759I$ $a=\ \ 0.099745-0.947443I$ $b=\ \ 0.961509-0.862525I$	$-3.47428-7.21832I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.480328 + 0.234145I$ $a = 0.645181 + 0.263999I$ $b = 0.63833 + 2.06030I$	$2.93119 - 2.30709I$	0
$u = 0.480328 - 0.234145I$ $a = 0.645181 - 0.263999I$ $b = 0.63833 - 2.06030I$	$2.93119 + 2.30709I$	0
$u = -1.33964 + 0.66038I$ $a = 0.288680 - 0.467997I$ $b = 0.710834 + 0.173822I$	$4.28909 + 2.40705I$	0
$u = -1.33964 - 0.66038I$ $a = 0.288680 + 0.467997I$ $b = 0.710834 - 0.173822I$	$4.28909 - 2.40705I$	0
$u = -0.203514 + 0.462059I$ $a = -0.498452 - 0.203786I$ $b = -1.08594 + 1.13362I$	$3.77352 + 1.55445I$	0
$u = -0.203514 - 0.462059I$ $a = -0.498452 + 0.203786I$ $b = -1.08594 - 1.13362I$	$3.77352 - 1.55445I$	0
$u = 1.01182 + 1.11575I$ $a = -0.150049 - 1.001530I$ $b = -1.37441 - 1.04277I$	$6.43708 + 11.83290I$	0
$u = 1.01182 - 1.11575I$ $a = -0.150049 + 1.001530I$ $b = -1.37441 + 1.04277I$	$6.43708 - 11.83290I$	0
$u = -0.76064 + 1.30057I$ $a = 0.531944 - 0.977126I$ $b = 1.45346 - 0.88581I$	$3.03450 - 11.32510I$	0
$u = -0.76064 - 1.30057I$ $a = 0.531944 + 0.977126I$ $b = 1.45346 + 0.88581I$	$3.03450 + 11.32510I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.02276+1.12285I$ $a=-0.175295+1.075170I$ $b=-1.20643+0.87713I$	$7.74447-9.34107I$	0
$u=-1.02276-1.12285I$ $a=-0.175295-1.075170I$ $b=-1.20643-0.87713I$	$7.74447+9.34107I$	0
$u=-1.25272+0.86217I$ $a=-0.129864+0.631629I$ $b=-0.405796+0.897437I$	$0.64538-2.19551I$	0
$u=-1.25272-0.86217I$ $a=-0.129864-0.631629I$ $b=-0.405796-0.897437I$	$0.64538+2.19551I$	0
$u=1.47088+0.43551I$ $a=-0.150101-0.520921I$ $b=-0.889172-0.005101I$	$8.24673-1.96112I$	0
$u=1.47088-0.43551I$ $a=-0.150101+0.520921I$ $b=-0.889172+0.005101I$	$8.24673+1.96112I$	0
$u=0.128227+0.433148I$ $a=-2.95399+3.84232I$ $b=0.446436+0.586240I$	$5.86258-0.03620I$	$-8.51865-7.11861I$
$u=0.128227-0.433148I$ $a=-2.95399-3.84232I$ $b=0.446436-0.586240I$	$5.86258+0.03620I$	$-8.51865+7.11861I$
$u=-0.96375+1.21268I$ $a=0.281208-0.936123I$ $b=1.28145-0.91835I$	$2.64160-10.42020I$	0
$u=-0.96375-1.21268I$ $a=0.281208+0.936123I$ $b=1.28145+0.91835I$	$2.64160+10.42020I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.02972+1.15963I$ $a=\ \ 0.077693-0.388786I$ $b=-0.093206-0.543065I$	$2.72888+4.60086I$	0
$u=-1.02972-1.15963I$ $a=\ \ 0.077693+0.388786I$ $b=-0.093206+0.543065I$	$2.72888-4.60086I$	0
$u=\ \ 1.00865+1.17904I$ $a=\ \ 0.226943+1.035080I$ $b=\ \ 1.26323+0.96179I$	$3.2140+15.9536I$	0
$u=\ \ 1.00865-1.17904I$ $a=\ \ 0.226943-1.035080I$ $b=\ \ 1.26323-0.96179I$	$3.2140-15.9536I$	0
$u=-1.04473+1.14831I$ $a=\ \ 0.137864-0.848757I$ $b=\ \ 0.92810-1.15122I$	$1.79329-12.95630I$	0
$u=-1.04473-1.14831I$ $a=\ \ 0.137864+0.848757I$ $b=\ \ 0.92810+1.15122I$	$1.79329+12.95630I$	0
$u=\ \ 0.132229+0.423552I$ $a=\ \ 0.781773-0.882008I$ $b=-0.719448+0.410608I$	$3.68417+1.71472I$	$-1.60627-2.07752I$
$u=\ \ 0.132229-0.423552I$ $a=\ \ 0.781773+0.882008I$ $b=-0.719448-0.410608I$	$3.68417-1.71472I$	$-1.60627+2.07752I$
$u=-1.10981+1.12120I$ $a=\ \ 0.147978+0.840492I$ $b=-1.043100+0.762408I$	$3.11150-12.99860I$	0
$u=-1.10981-1.12120I$ $a=\ \ 0.147978-0.840492I$ $b=-1.043100-0.762408I$	$3.11150+12.99860I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.11946 + 1.12442I$ $a = -0.133931 - 0.782906I$ $b = -0.719777 - 0.949383I$	$-0.68169 + 8.60166I$	0
$u = 1.11946 - 1.12442I$ $a = -0.133931 + 0.782906I$ $b = -0.719777 + 0.949383I$	$-0.68169 - 8.60166I$	0
$u = -1.03041 + 1.20976I$ $a = -0.221004 + 1.000820I$ $b = -1.31983 + 0.97180I$	$7.8465 - 21.9554I$	0
$u = -1.03041 - 1.20976I$ $a = -0.221004 - 1.000820I$ $b = -1.31983 - 0.97180I$	$7.8465 + 21.9554I$	0
$u = 0.396484 + 0.016180I$ $a = -0.36961 + 3.04745I$ $b = 1.185590 + 0.084670I$	$8.74741 + 6.36166I$	$2.72744 - 3.86093I$
$u = 0.396484 - 0.016180I$ $a = -0.36961 - 3.04745I$ $b = 1.185590 - 0.084670I$	$8.74741 - 6.36166I$	$2.72744 + 3.86093I$
$u = -1.31298 + 0.93260I$ $a = -0.395878 + 0.212765I$ $b = -0.902436 - 0.167419I$	$8.47015 + 1.19174I$	0
$u = -1.31298 - 0.93260I$ $a = -0.395878 - 0.212765I$ $b = -0.902436 + 0.167419I$	$8.47015 - 1.19174I$	0
$u = -0.353571 + 0.150546I$ $a = -1.51210 - 0.45912I$ $b = 1.21119 - 1.60449I$	$3.85932 - 1.93015I$	$-8.76320 + 1.25746I$
$u = -0.353571 - 0.150546I$ $a = -1.51210 + 0.45912I$ $b = 1.21119 + 1.60449I$	$3.85932 + 1.93015I$	$-8.76320 - 1.25746I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.33498 + 0.92312I$ $a = -0.358839 - 0.383050I$ $b = -0.709186 + 0.452131I$	$7.16669 - 3.72862I$	0
$u = 1.33498 - 0.92312I$ $a = -0.358839 + 0.383050I$ $b = -0.709186 - 0.452131I$	$7.16669 + 3.72862I$	0
$u = 1.42503 + 0.83277I$ $a = 0.387105 + 0.288639I$ $b = 0.775305 - 0.222188I$	$4.40411 - 7.63424I$	0
$u = 1.42503 - 0.83277I$ $a = 0.387105 - 0.288639I$ $b = 0.775305 + 0.222188I$	$4.40411 + 7.63424I$	0
$u = -1.09271 + 1.24958I$ $a = 0.046544 - 0.516447I$ $b = 1.065130 - 0.524243I$	$1.52411 - 5.12225I$	0
$u = -1.09271 - 1.24958I$ $a = 0.046544 + 0.516447I$ $b = 1.065130 + 0.524243I$	$1.52411 + 5.12225I$	0
$u = 0.223798 + 0.234276I$ $a = -5.20962 - 3.10965I$ $b = 0.694330 + 0.103111I$	$5.97038 + 5.12187I$	$7.70469 - 8.08023I$
$u = 0.223798 - 0.234276I$ $a = -5.20962 + 3.10965I$ $b = 0.694330 - 0.103111I$	$5.97038 - 5.12187I$	$7.70469 + 8.08023I$
$u = -1.46193 + 0.82594I$ $a = 0.192235 - 0.252567I$ $b = -0.0395834 + 0.0552702I$	$2.59301 + 4.40230I$	0
$u = -1.46193 - 0.82594I$ $a = 0.192235 + 0.252567I$ $b = -0.0395834 - 0.0552702I$	$2.59301 - 4.40230I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.97193 + 1.37857I$ $a = -0.142327 - 0.495099I$ $b = -0.551630 - 0.374594I$	$-2.24116 + 1.81447I$	0
$u = \quad 0.97193 - 1.37857I$ $a = -0.142327 + 0.495099I$ $b = -0.551630 + 0.374594I$	$-2.24116 - 1.81447I$	0
$u = -1.18036 + 1.20547I$ $a = \quad 0.239873 - 0.711198I$ $b = \quad 0.709501 - 0.401603I$	$5.74780 - 6.11441I$	0
$u = -1.18036 - 1.20547I$ $a = \quad 0.239873 + 0.711198I$ $b = \quad 0.709501 + 0.401603I$	$5.74780 + 6.11441I$	0
$u = \quad 0.40819 + 1.67318I$ $a = -0.181053 - 0.136900I$ $b = -1.284290 - 0.268606I$	$4.06642 + 6.42884I$	0
$u = \quad 0.40819 - 1.67318I$ $a = -0.181053 + 0.136900I$ $b = -1.284290 + 0.268606I$	$4.06642 - 6.42884I$	0
$u = \quad 1.03742 + 1.37613I$ $a = -0.345050 - 0.780588I$ $b = -1.28894 - 0.68638I$	$5.55838 + 10.70500I$	0
$u = \quad 1.03742 - 1.37613I$ $a = -0.345050 + 0.780588I$ $b = -1.28894 + 0.68638I$	$5.55838 - 10.70500I$	0
$u = -1.51891 + 0.84541I$ $a = -0.348426 + 0.300749I$ $b = -0.772984 - 0.308134I$	$9.1419 + 13.3347I$	0
$u = -1.51891 - 0.84541I$ $a = -0.348426 - 0.300749I$ $b = -0.772984 + 0.308134I$	$9.1419 - 13.3347I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.02030 + 1.40867I$ $a = -0.166080 - 0.503088I$ $b = -1.219540 - 0.320474I$	$5.29452 + 5.23041I$	0
$u = 1.02030 - 1.40867I$ $a = -0.166080 + 0.503088I$ $b = -1.219540 + 0.320474I$	$5.29452 - 5.23041I$	0
$u = -1.08667 + 1.39490I$ $a = 0.102621 - 0.462200I$ $b = 0.751778 - 0.564207I$	$0.10829 - 6.82700I$	0
$u = -1.08667 - 1.39490I$ $a = 0.102621 + 0.462200I$ $b = 0.751778 + 0.564207I$	$0.10829 + 6.82700I$	0
$u = -0.17172 + 1.76223I$ $a = 0.701510 - 0.173000I$ $b = 0.370775 - 0.162537I$	$4.69857 - 6.92333I$	0
$u = -0.17172 - 1.76223I$ $a = 0.701510 + 0.173000I$ $b = 0.370775 + 0.162537I$	$4.69857 + 6.92333I$	0
$u = 0.140804 + 0.167460I$ $a = 2.73423 + 0.74596I$ $b = -1.97595 - 0.74814I$	$2.74230 + 1.89133I$	$-0.60614 + 3.44577I$
$u = 0.140804 - 0.167460I$ $a = 2.73423 - 0.74596I$ $b = -1.97595 + 0.74814I$	$2.74230 - 1.89133I$	$-0.60614 - 3.44577I$
$u = 1.28669 + 1.23220I$ $a = -0.009501 - 0.416180I$ $b = -1.079060 - 0.579450I$	$4.83529 + 6.60854I$	0
$u = 1.28669 - 1.23220I$ $a = -0.009501 + 0.416180I$ $b = -1.079060 + 0.579450I$	$4.83529 - 6.60854I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.154922+0.071054I$ $a=\ \ 2.18622-7.26106I$ $b=-1.018360-0.312085I$	$3.46077+1.93838I$	$-0.06520-3.72082I$
$u=-0.154922-0.071054I$ $a=\ \ 2.18622+7.26106I$ $b=-1.018360+0.312085I$	$3.46077-1.93838I$	$-0.06520+3.72082I$
$u=\ \ 0.99360+1.54679I$ $a=\ \ 0.471346+0.498026I$ $b=\ \ 0.720296+0.416931I$	$5.89620+6.22721I$	0
$u=\ \ 0.99360-1.54679I$ $a=\ \ 0.471346-0.498026I$ $b=\ \ 0.720296-0.416931I$	$5.89620-6.22721I$	0
$u=-1.19654+1.63751I$ $a=\ \ 0.050463+0.189075I$ $b=-0.671970+0.314635I$	$2.35878+3.98604I$	0
$u=-1.19654-1.63751I$ $a=\ \ 0.050463-0.189075I$ $b=-0.671970-0.314635I$	$2.35878-3.98604I$	0
$u=\ \ 1.37054+1.66782I$ $a=-0.206872-0.374388I$ $b=-0.240681-0.314940I$	$-1.11240+1.49122I$	0
$u=\ \ 1.37054-1.66782I$ $a=-0.206872+0.374388I$ $b=-0.240681+0.314940I$	$-1.11240-1.49122I$	0

II. $I_2^u = \langle -6.52\times 10^{155}u^{54} + 2.65\times 10^{155}u^{53} + \cdots + 2.95\times 10^{154}b + 1.64\times 10^{156},\ -1.26\times 10^{154}u^{54} + 1.73\times 10^{153}u^{53} + \cdots + 7.37\times 10^{153}a + 3.33\times 10^{154},\ u^{55} + 5u^{53} + \cdots - 3u - 1\rangle$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.70268u^{54} - 0.235071u^{53} + \cdots + 3.54087u - 4.51587 \\ 22.1127u^{54} - 8.98377u^{53} + \cdots - 23.6168u - 55.7062 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -20.4392u^{54} + 8.69449u^{53} + \cdots + 26.1602u + 51.4254 \\ 25.6100u^{54} - 10.3512u^{53} + \cdots - 28.2636u - 64.6358 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -20.4100u^{54} + 8.74869u^{53} + \cdots + 27.1577u + 51.1904 \\ 22.1127u^{54} - 8.98377u^{53} + \cdots - 23.6168u - 55.7062 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -6.98647u^{54} + 1.82676u^{53} + \cdots + 9.53270u + 26.8842 \\ 18.7384u^{54} - 6.80379u^{53} + \cdots - 13.2459u - 50.5375 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -17.6729u^{54} + 7.43637u^{53} + \cdots + 26.4547u + 44.6968 \\ 16.7195u^{54} - 6.26131u^{53} + \cdots - 11.4868u - 44.1561 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -73.5386u^{54} + 28.7137u^{53} + \cdots + 91.7107u + 183.342 \\ 93.0699u^{54} - 35.6902u^{53} + \cdots - 111.371u - 240.708 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 4.06505u^{54} - 1.82961u^{53} + \cdots + 0.820804u - 4.39077 \\ -7.68688u^{54} + 3.14742u^{53} + \cdots + 6.53397u + 19.2625 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -2.27687u^{54} + 0.769765u^{53} + \cdots - 3.33168u + 6.58859 \\ 1.67048u^{54} - 0.821167u^{53} + \cdots - 2.40500u - 4.31691 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 16.0428u^{54} - 5.41218u^{53} + \cdots + 2.74299u - 37.7904 \\ -17.3886u^{54} + 5.16749u^{53} + \cdots + 1.31441u + 50.1662 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 61.6350u^{54} - 29.9698u^{53} + \cdots - 148.718u - 146.660$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{55} - 11u^{54} + \cdots + 643u - 107$
c_2	$u^{55} + 4u^{54} + \cdots - 16u + 3$
c_3	$u^{55} + 7u^{54} + \cdots + u - 1$
c_4	$u^{55} - 2u^{54} + \cdots + 71u - 9$
c_5	$u^{55} + 13u^{53} + \cdots + 144u - 17$
c_6	$u^{55} + 5u^{53} + \cdots - 3u - 1$
c_7	$u^{55} - 3u^{54} + \cdots + 56u - 103$
c_8	$u^{55} + 2u^{54} + \cdots + 71u + 9$
c_9	$u^{55} - 7u^{54} + \cdots + 7u - 1$
c_{10}	$u^{55} + 2u^{54} + \cdots + 11u - 1$
c_{11}	$u^{55} + 18u^{54} + \cdots + 12u - 1$
c_{12}	$u^{55} - u^{54} + \cdots + 10u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{55}+5y^{54}+\cdots-209933y-11449$
c_2	$y^{55}+26y^{54}+\cdots+214y-9$
c_3	$y^{55}+13y^{54}+\cdots-15y-1$
c_4, c_8	$y^{55}+34y^{54}+\cdots-287y-81$
c_5	$y^{55}+26y^{54}+\cdots-18568y-289$
c_6	$y^{55}+10y^{54}+\cdots+3y-1$
c_7	$y^{55}-y^{54}+\cdots-168874y-10609$
c_9	$y^{55}+19y^{54}+\cdots-69y-1$
c_{10}	$y^{55}-12y^{54}+\cdots-9y-1$
c_{11}	$y^{55}-12y^{54}+\cdots+64y-1$
c_{12}	$y^{55}+33y^{54}+\cdots+22y-1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.392496 + 0.903206I$ $a = -1.41803 - 0.84217I$ $b = -0.343072 - 0.158955I$	$5.10076 + 5.20087I$	$-2.79597 - 5.98933I$
$u = 0.392496 - 0.903206I$ $a = -1.41803 + 0.84217I$ $b = -0.343072 + 0.158955I$	$5.10076 - 5.20087I$	$-2.79597 + 5.98933I$
$u = -0.588983 + 0.773442I$ $a = -0.523476 + 0.256215I$ $b = 0.595533 - 0.266458I$	$0.17368 - 5.22925I$	$-7.61266 + 6.31352I$
$u = -0.588983 - 0.773442I$ $a = -0.523476 - 0.256215I$ $b = 0.595533 + 0.266458I$	$0.17368 + 5.22925I$	$-7.61266 - 6.31352I$
$u = 0.394923 + 0.836293I$ $a = 0.219725 + 0.854082I$ $b = -0.209834 + 0.498338I$	$-2.51234 + 0.77305I$	$-12.56130 - 0.64379I$
$u = 0.394923 - 0.836293I$ $a = 0.219725 - 0.854082I$ $b = -0.209834 - 0.498338I$	$-2.51234 - 0.77305I$	$-12.56130 + 0.64379I$
$u = 0.596393 + 0.688127I$ $a = -0.257234 + 0.466341I$ $b = -0.886046 + 0.351246I$	$-2.46159 + 0.56839I$	$-17.6390 - 4.0305I$
$u = 0.596393 - 0.688127I$ $a = -0.257234 - 0.466341I$ $b = -0.886046 - 0.351246I$	$-2.46159 - 0.56839I$	$-17.6390 + 4.0305I$
$u = -0.849492 + 0.298630I$ $a = -0.367907 - 0.844742I$ $b = 0.449764 - 1.194280I$	$1.75515 - 2.57773I$	$-4.47640 + 5.33254I$
$u = -0.849492 - 0.298630I$ $a = -0.367907 + 0.844742I$ $b = 0.449764 + 1.194280I$	$1.75515 + 2.57773I$	$-4.47640 - 5.33254I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ 0.897757$ $a = -1.23092$ $b = \ 0.397408$	-2.46316	-43.5550
$u = \ 0.057465 + 0.881942I$ $a = \ 0.38914 + 1.80151I$ $b = \ 0.34829 + 1.53710I$	$-2.27118 + 2.07508I$	$-16.4211 - 0.1865I$
$u = \ 0.057465 - 0.881942I$ $a = \ 0.38914 - 1.80151I$ $b = \ 0.34829 - 1.53710I$	$-2.27118 - 2.07508I$	$-16.4211 + 0.1865I$
$u = -1.151960 + 0.026183I$ $a = -1.025970 + 0.530145I$ $b = \ 0.661678 - 0.225347I$	$5.90994 - 0.09408I$	0
$u = -1.151960 - 0.026183I$ $a = -1.025970 - 0.530145I$ $b = \ 0.661678 + 0.225347I$	$5.90994 + 0.09408I$	0
$u = \ 0.608554 + 1.009920I$ $a = \ 0.482335 + 1.223390I$ $b = \ 0.776732 + 1.062870I$	$0.35661 + 5.93712I$	0
$u = \ 0.608554 - 1.009920I$ $a = \ 0.482335 - 1.223390I$ $b = \ 0.776732 - 1.062870I$	$0.35661 - 5.93712I$	0
$u = \ 1.032130 + 0.593878I$ $a = -0.491914 - 0.672064I$ $b = -0.748280 + 0.273265I$	$5.82791 - 3.59484I$	0
$u = \ 1.032130 - 0.593878I$ $a = -0.491914 + 0.672064I$ $b = -0.748280 - 0.273265I$	$5.82791 + 3.59484I$	0
$u = -0.307730 + 0.746549I$ $a = -0.543724 - 1.282360I$ $b = \ 0.837803 - 0.798439I$	$0.24044 - 4.20991I$	$-6.05030 + 8.60421I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.307730-0.746549I$ $a=-0.543724+1.282360I$ $b=\ \ 0.837803+0.798439I$	$0.24044+4.20991I$	$-6.05030-8.60421I$
$u=-0.745754+0.240312I$ $a=\ \ 1.20964+0.88153I$ $b=-0.483828+1.083530I$	$6.9910-12.5697I$	$-0.86036+8.98948I$
$u=-0.745754-0.240312I$ $a=\ \ 1.20964-0.88153I$ $b=-0.483828-1.083530I$	$6.9910+12.5697I$	$-0.86036-8.98948I$
$u=\ \ 0.585136+0.266624I$ $a=-1.44027+1.56477I$ $b=\ \ 0.248980+1.024120I$	$2.12371+6.79065I$	$-2.07557-8.71636I$
$u=\ \ 0.585136-0.266624I$ $a=-1.44027-1.56477I$ $b=\ \ 0.248980-1.024120I$	$2.12371-6.79065I$	$-2.07557+8.71636I$
$u=-0.110522+0.624657I$ $a=-0.13871-3.04242I$ $b=\ \ 0.34334-1.92111I$	$-0.95749-2.54559I$	$6.16642+6.09316I$
$u=-0.110522-0.624657I$ $a=-0.13871+3.04242I$ $b=\ \ 0.34334+1.92111I$	$-0.95749+2.54559I$	$6.16642-6.09316I$
$u=\ \ 0.992301+0.977412I$ $a=\ \ 0.298947-1.081510I$ $b=-0.877145-0.754539I$	$-2.62629+5.74156I$	0
$u=\ \ 0.992301-0.977412I$ $a=\ \ 0.298947+1.081510I$ $b=-0.877145+0.754539I$	$-2.62629-5.74156I$	0
$u=-0.841590+1.117700I$ $a=\ \ 0.151186-0.621747I$ $b=\ \ 1.154810-0.610011I$	$1.42740-4.61666I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.841590-1.117700I$ $a=\ 0.151186+0.621747I$ $b=\ 1.154810+0.610011I$	$1.42740+4.61666I$	0
$u=-0.518985+0.040876I$ $a=\ 3.33346+0.11249I$ $b=-0.343316-0.508042I$	$6.39208-0.18827I$	$5.50995-2.02170I$
$u=-0.518985-0.040876I$ $a=\ 3.33346-0.11249I$ $b=-0.343316+0.508042I$	$6.39208+0.18827I$	$5.50995+2.02170I$
$u=\ 1.23516+0.83241I$ $a=-0.023663-0.735449I$ $b=-0.950409-0.430103I$	$6.98223+4.40163I$	0
$u=\ 1.23516-0.83241I$ $a=-0.023663+0.735449I$ $b=-0.950409+0.430103I$	$6.98223-4.40163I$	0
$u=-1.31803+0.82290I$ $a=\ 0.255557-0.334629I$ $b=\ 0.881668+0.197628I$	$6.67034+1.49346I$	0
$u=-1.31803-0.82290I$ $a=\ 0.255557+0.334629I$ $b=\ 0.881668-0.197628I$	$6.67034-1.49346I$	0
$u=\ 0.91077+1.27886I$ $a=-0.378228-0.905382I$ $b=-1.32057-0.89377I$	$3.70840+10.86260I$	0
$u=\ 0.91077-1.27886I$ $a=-0.378228+0.905382I$ $b=-1.32057+0.89377I$	$3.70840-10.86260I$	0
$u=-1.04612+1.22402I$ $a=\ 0.217162-0.868055I$ $b=\ 1.24450-0.78239I$	$5.23592-9.78749I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.04612-1.22402I$ $a=\ 0.217162+0.868055I$ $b=\ 1.24450+0.78239I$	$5.23592+9.78749I$	0
$u=-0.384465+0.016975I$ $a=\ 0.508108-0.591786I$ $b=\ 1.85003-2.88937I$	$2.97392-2.05206I$	$45.0433-4.9130I$
$u=-0.384465-0.016975I$ $a=\ 0.508108+0.591786I$ $b=\ 1.85003+2.88937I$	$2.97392+2.05206I$	$45.0433+4.9130I$
$u=\ 0.036153+0.332737I$ $a=-0.557277+1.107470I$ $b=\ 1.29433+2.86786I$	$3.54058-1.73301I$	$-36.6794+20.4505I$
$u=\ 0.036153-0.332737I$ $a=-0.557277-1.107470I$ $b=\ 1.29433-2.86786I$	$3.54058+1.73301I$	$-36.6794-20.4505I$
$u=\ 0.248228+0.210642I$ $a=\ 5.29143+0.60921I$ $b=-0.593571-0.610439I$	$4.74122+3.15766I$	$-7.73162-5.76730I$
$u=\ 0.248228-0.210642I$ $a=\ 5.29143-0.60921I$ $b=-0.593571+0.610439I$	$4.74122-3.15766I$	$-7.73162+5.76730I$
$u=-0.71942+1.73813I$ $a=-0.542825+0.417973I$ $b=-0.650889+0.279407I$	$5.17168-7.09844I$	0
$u=-0.71942-1.73813I$ $a=-0.542825-0.417973I$ $b=-0.650889-0.279407I$	$5.17168+7.09844I$	0
$u=-1.33902+1.42251I$ $a=-0.085180+0.188623I$ $b=-0.603905+0.364394I$	$2.62680+3.89829I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.33902-1.42251I$ $a=-0.085180-0.188623I$ $b=-0.603905-0.364394I$	$2.62680-3.89829I$	0
$u=\ \ 0.95797+1.71626I$ $a=-0.136922-0.321586I$ $b=-1.178280-0.420218I$	$4.28123+6.89130I$	0
$u=\ \ 0.95797-1.71626I$ $a=-0.136922+0.321586I$ $b=-1.178280+0.420218I$	$4.28123-6.89130I$	0
$u=\ \ 1.42550+1.66416I$ $a=\ \ 0.190111+0.367734I$ $b=\ \ 0.302978+0.320794I$	$-1.08326+1.55206I$	0
$u=\ \ 1.42550-1.66416I$ $a=\ \ 0.190111-0.367734I$ $b=\ \ 0.302978-0.320794I$	$-1.08326-1.55206I$	0

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{55}-11u^{54}+\cdots+643u-107)$ $\cdot(u^{208}+4u^{207}+\cdots-224906561670u-63352175999)$
c_2	$(u^{55}+4u^{54}+\cdots-16u+3)(u^{208}-5u^{207}+\cdots-237737u+17081)$
c_3	$(u^{55}+7u^{54}+\cdots+u-1)(u^{208}-4u^{207}+\cdots+28u-1)$
c_4	$(u^{55}-2u^{54}+\cdots+71u-9)(u^{208}+3u^{207}+\cdots+2214u-83)$
c_5	$(u^{55}+13u^{53}+\cdots+144u-17)$ $\cdot(u^{208}-u^{207}+\cdots-431064724298593u+90684077361587)$
c_6	$(u^{55}+5u^{53}+\cdots-3u-1)(u^{208}-5u^{207}+\cdots+270u+71)$
c_7	$(u^{55}-3u^{54}+\cdots+56u-103)$ $\cdot(u^{208}-18u^{207}+\cdots-8169806861101u+531367876849)$
c_8	$(u^{55}+2u^{54}+\cdots+71u+9)(u^{208}+3u^{207}+\cdots+2214u-83)$
c_9	$(u^{55}-7u^{54}+\cdots+7u-1)$ $\cdot(u^{208}+33u^{206}+\cdots+36106632u+12489409)$
c_{10}	$(u^{55}+2u^{54}+\cdots+11u-1)(u^{208}+u^{207}+\cdots+147178u-2621)$
c_{11}	$(u^{55}+18u^{54}+\cdots+12u-1)(u^{208}-7u^{207}+\cdots+5619u+531)$
c_{12}	$(u^{55}-u^{54}+\cdots+10u+1)$ $\cdot(u^{208}-2u^{207}+\cdots-838743923703u+62461848131)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{55}+5y^{54}+\cdots-209933y-11449)$ $\cdot(y^{208}+72y^{207}+\cdots+2.81\times10^{23}y+4.01\times10^{21})$
c_2	$(y^{55}+26y^{54}+\cdots+214y-9)$ $\cdot(y^{208}-7y^{207}+\cdots+22229892265y+291760561)$
c_3	$(y^{55}+13y^{54}+\cdots-15y-1)(y^{208}+12y^{207}+\cdots+542y+1)$
c_4, c_8	$(y^{55}+34y^{54}+\cdots-287y-81)$ $\cdot(y^{208}+145y^{207}+\cdots-1270546y+6889)$
c_5	$(y^{55}+26y^{54}+\cdots-18568y-289)$ $\cdot(y^{208}+117y^{207}+\cdots+1.95\times10^{29}y+8.22\times10^{27})$
c_6	$(y^{55}+10y^{54}+\cdots+3y-1)(y^{208}+25y^{207}+\cdots+90684y+5041)$
c_7	$(y^{55}-y^{54}+\cdots-168874y-10609)$ $\cdot(y^{208}+74y^{207}+\cdots+2.40\times10^{25}y+2.82\times10^{23})$
c_9	$(y^{55}+19y^{54}+\cdots-69y-1)$ $\cdot(y^{208}+66y^{207}+\cdots+6452214131562176y+155985337169281)$
c_{10}	$(y^{55}-12y^{54}+\cdots-9y-1)$ $\cdot(y^{208}+19y^{207}+\cdots-5108039792y+6869641)$
c_{11}	$(y^{55}-12y^{54}+\cdots+64y-1)$ $\cdot(y^{208}-17y^{207}+\cdots-28051569y+281961)$
c_{12}	$(y^{55}+33y^{54}+\cdots+22y-1)$ $\cdot(y^{208}+92y^{207}+\cdots+9.60\times10^{22}y+3.90\times10^{21})$