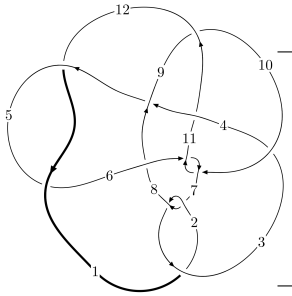
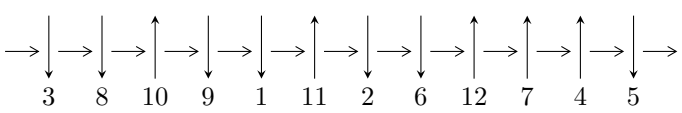
$12a_{0754}$ $(K12a_{0754})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -4.46501 \times 10^{559} u^{176} - 3.76087 \times 10^{559} u^{175} + \cdots + 3.16375 \times 10^{560} b - 5.29003 \times 10^{561}, \\ & - 1.55061 \times 10^{560} u^{176} - 1.24993 \times 10^{560} u^{175} + \cdots + 6.89926 \times 10^{560} a - 2.74571 \times 10^{562}, \\ & u^{177} + u^{176} + \cdots - 113u + 181 \rangle \\ I_2^u = \langle & 77050238748 u^{45} - 49060443352 u^{44} + \cdots + 319298023 69 b - 481900138262, \\ & - 331992933622 u^{45} - 546861658639 u^{44} + \cdots + 319298023 69 a + 478475058213, \\ & u^{46} - 14u^{44} + \cdots + 3u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 223 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. $\boldsymbol{I_1^u = \langle -4.47 \times 10^{559} u^{176} - 3.76 \times 10^{559} u^{175} + \cdots + 3.16 \times 10^{560} b - 5.29 \times 10^{561},\ -1.55 \times 10^{560} u^{176} - 1.25 \times 10^{560} u^{175} + \cdots + 6.90 \times 10^{560} a - 2.75 \times 10^{562},\ u^{177} + u^{176} + \cdots - 113u + 181 \rangle}$

(i) Arc colorings

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

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

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.224751u^{176} + 0.181169u^{175} + \cdots - 91.7426u + 39.7972 \\ 0.141130u^{176} + 0.118874u^{175} + \cdots - 50.5273u + 16.7208 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0966568u^{176} + 0.154708u^{175} + \cdots + 73.3219u - 43.4893 \\ 0.0682880u^{176} + 0.0385578u^{175} + \cdots + 40.6569u - 20.0654 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.110994u^{176} + 0.0695990u^{175} + \cdots - 132.292u + 49.7926 \\ 0.0211045u^{176} - 0.0878728u^{175} + \cdots - 73.3585u + 41.7302 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.00914328u^{176} + 0.00801270u^{175} + \cdots + 86.7261u - 33.6343 \\ 0.0205661u^{176} - 0.0320211u^{175} + \cdots + 30.3503u - 4.79365 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.0836203u^{176} + 0.0622956u^{175} + \cdots - 41.2152u + 23.0764 \\ 0.141130u^{176} + 0.118874u^{175} + \cdots - 50.5273u + 16.7208 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.0277595u^{176} + 0.180289u^{175} + \cdots - 6.60090u - 14.9261 \\ -0.0125667u^{176} + 0.0103138u^{175} + \cdots - 29.9452u + 3.75498 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0206965u^{176} - 0.105243u^{175} + \cdots + 42.4728u + 20.1661 \\ 0.121159u^{176} + 0.164325u^{175} + \cdots + 14.5812u - 26.0587 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.724599u^{176} + 1.40135u^{175} + \cdots - 17.4844u - 116.459$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{177} + 89u^{176} + \cdots + 1149811u + 32761$
c_2, c_7	$u^{177} + u^{176} + \cdots - 113u + 181$
c_3	$u^{177} + 16u^{175} + \cdots + 2770141136u + 148430897$
c_4	$u^{177} + 2u^{176} + \cdots - 118u - 47$
c_5, c_{12}	$u^{177} - 68u^{175} + \cdots - 8904u + 467$
c_6, c_{10}	$u^{177} + 51u^{175} + \cdots + 1008921u + 96053$
c_8	$u^{177} - 10u^{176} + \cdots + 224156u + 83191$
c_9	$u^{177} + 13u^{176} + \cdots - 3396057u - 216341$
c_{11}	$u^{177} - 4u^{176} + \cdots - 500u + 41$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{177} + 15y^{176} + \cdots + 55508891787y - 1073283121$
c_2, c_7	$y^{177} - 89y^{176} + \cdots + 1149811y - 32761$
c_3	$y^{177} + 32y^{176} + \cdots - 268829528448372104y - 22031731184224609$
c_4	$y^{177} - 32y^{176} + \cdots + 102002y - 2209$
c_5, c_{12}	$y^{177} - 136y^{176} + \cdots - 143543164y - 218089$
c_6, c_{10}	$y^{177} + 102y^{176} + \cdots - 436351764825y - 9226178809$
c_8	$y^{177} - 30y^{176} + \cdots + 663714149210y - 6920742481$
c_9	$y^{177} + 43y^{176} + \cdots - 5046528559981y - 46803428281$
c_{11}	$y^{177} - 14y^{176} + \cdots + 185384y - 1681$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.974325 + 0.222085I$ $a = 0.81562 + 2.35721I$ $b = -0.09517 + 1.55029I$	$-6.50033 - 2.27440I$	0
$u = 0.974325 - 0.222085I$ $a = 0.81562 - 2.35721I$ $b = -0.09517 - 1.55029I$	$-6.50033 + 2.27440I$	0
$u = 0.995811 + 0.113591I$ $a = -0.03619 - 2.56105I$ $b = -0.210574 - 1.363500I$	$-6.60802 + 1.95285I$	0
$u = 0.995811 - 0.113591I$ $a = -0.03619 + 2.56105I$ $b = -0.210574 + 1.363500I$	$-6.60802 - 1.95285I$	0
$u = 0.891267 + 0.464106I$ $a = -1.80760 - 1.69279I$ $b = 0.148991 - 0.762299I$	$0.290980 + 0.835797I$	0
$u = 0.891267 - 0.464106I$ $a = -1.80760 + 1.69279I$ $b = 0.148991 + 0.762299I$	$0.290980 - 0.835797I$	0
$u = 0.932751 + 0.374408I$ $a = 0.347062 - 0.824795I$ $b = 1.238490 + 0.232968I$	$0.20430 + 1.61888I$	0
$u = 0.932751 - 0.374408I$ $a = 0.347062 + 0.824795I$ $b = 1.238490 - 0.232968I$	$0.20430 - 1.61888I$	0
$u = 0.249112 + 0.975833I$ $a = 0.059917 - 0.579235I$ $b = -0.401271 - 1.184370I$	$-5.10078 + 5.95524I$	0
$u = 0.249112 - 0.975833I$ $a = 0.059917 + 0.579235I$ $b = -0.401271 + 1.184370I$	$-5.10078 - 5.95524I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.659460 + 0.739964I$ $a = 0.265306 - 0.602206I$ $b = -0.602881 - 0.581728I$	$0.50499 - 5.98199I$	0
$u = 0.659460 - 0.739964I$ $a = 0.265306 + 0.602206I$ $b = -0.602881 + 0.581728I$	$0.50499 + 5.98199I$	0
$u = -0.960156 + 0.320973I$ $a = -2.51324 + 3.47680I$ $b = 0.036699 + 0.860470I$	$-4.97745 - 3.70596I$	0
$u = -0.960156 - 0.320973I$ $a = -2.51324 - 3.47680I$ $b = 0.036699 - 0.860470I$	$-4.97745 + 3.70596I$	0
$u = -0.327466 + 0.959605I$ $a = 0.373522 + 0.507460I$ $b = -0.623318 + 1.250290I$	$-3.9652 - 14.7921I$	0
$u = -0.327466 - 0.959605I$ $a = 0.373522 - 0.507460I$ $b = -0.623318 - 1.250290I$	$-3.9652 + 14.7921I$	0
$u = 0.873905 + 0.453283I$ $a = 0.18625 + 1.54037I$ $b = -1.080860 + 0.499009I$	$0.24529 - 4.90883I$	0
$u = 0.873905 - 0.453283I$ $a = 0.18625 - 1.54037I$ $b = -1.080860 - 0.499009I$	$0.24529 + 4.90883I$	0
$u = 0.407136 + 0.876029I$ $a = 0.228493 - 0.230111I$ $b = -0.625577 - 1.213760I$	$0.65768 + 8.86127I$	0
$u = 0.407136 - 0.876029I$ $a = 0.228493 + 0.230111I$ $b = -0.625577 + 1.213760I$	$0.65768 - 8.86127I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.929681+0.252073I$ $a=\ \ 1.98508-1.54026I$ $b=-0.101282+0.438544I$	$-4.69188+6.03218I$	0
$u=-0.929681-0.252073I$ $a=\ \ 1.98508+1.54026I$ $b=-0.101282-0.438544I$	$-4.69188-6.03218I$	0
$u=-0.891310+0.531806I$ $a=-0.659025+0.106796I$ $b=-0.613693+0.630340I$	$-0.962538+0.626000I$	0
$u=-0.891310-0.531806I$ $a=-0.659025-0.106796I$ $b=-0.613693-0.630340I$	$-0.962538-0.626000I$	0
$u=-0.484590+0.828041I$ $a=-0.455710-0.186890I$ $b=\ \ 0.390296-1.060170I$	$-1.27015-3.46858I$	0
$u=-0.484590-0.828041I$ $a=-0.455710+0.186890I$ $b=\ \ 0.390296+1.060170I$	$-1.27015+3.46858I$	0
$u=\ \ 0.981309+0.356252I$ $a=-0.0327071-0.1150610I$ $b=\ \ 0.825548+0.833562I$	$-4.80627+0.53223I$	0
$u=\ \ 0.981309-0.356252I$ $a=-0.0327071+0.1150610I$ $b=\ \ 0.825548-0.833562I$	$-4.80627-0.53223I$	0
$u=\ \ 0.801643+0.676667I$ $a=-0.535505-0.017695I$ $b=\ \ 0.469122-0.536520I$	$3.06544-2.33212I$	0
$u=\ \ 0.801643-0.676667I$ $a=-0.535505+0.017695I$ $b=\ \ 0.469122+0.536520I$	$3.06544+2.33212I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.997233 + 0.341494I$ $a = 1.00789 + 1.50673I$ $b = 0.56095 + 1.59851I$	$-7.10045 + 0.18077I$	0
$u = 0.997233 - 0.341494I$ $a = 1.00789 - 1.50673I$ $b = 0.56095 - 1.59851I$	$-7.10045 - 0.18077I$	0
$u = -0.425461 + 0.839516I$ $a = -0.655201 + 0.424317I$ $b = 0.541164 + 0.346849I$	$-1.55079 - 0.51771I$	0
$u = -0.425461 - 0.839516I$ $a = -0.655201 - 0.424317I$ $b = 0.541164 - 0.346849I$	$-1.55079 + 0.51771I$	0
$u = -0.672996 + 0.819837I$ $a = -0.809570 - 0.195709I$ $b = 0.293941 + 0.657252I$	$-0.20302 - 1.64601I$	0
$u = -0.672996 - 0.819837I$ $a = -0.809570 + 0.195709I$ $b = 0.293941 - 0.657252I$	$-0.20302 + 1.64601I$	0
$u = -0.936300$ $a = -1.21722$ $b = -0.597295$	-2.21006	0
$u = 0.546028 + 0.739177I$ $a = -0.91845 + 1.25629I$ $b = 0.353663 + 0.981728I$	$-1.28885 + 4.62079I$	0
$u = 0.546028 - 0.739177I$ $a = -0.91845 - 1.25629I$ $b = 0.353663 - 0.981728I$	$-1.28885 - 4.62079I$	0
$u = -0.652726 + 0.646500I$ $a = -0.619657 + 0.655257I$ $b = 0.623344 + 0.968272I$	$-0.26043 + 4.06910I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.652726-0.646500I$ $a=-0.619657-0.655257I$ $b=\ \ 0.623344-0.968272I$	$-0.26043-4.06910I$	0
$u=\ \ 0.865311+0.268129I$ $a=\ \ 1.34391+3.02315I$ $b=-0.518492+1.045400I$	$-4.20869-3.12674I$	0
$u=\ \ 0.865311-0.268129I$ $a=\ \ 1.34391-3.02315I$ $b=-0.518492-1.045400I$	$-4.20869+3.12674I$	0
$u=\ \ 0.019928+0.897306I$ $a=-1.023540-0.325536I$ $b=\ \ 0.438641-0.962197I$	$-4.15749-1.66209I$	0
$u=\ \ 0.019928-0.897306I$ $a=-1.023540+0.325536I$ $b=\ \ 0.438641+0.962197I$	$-4.15749+1.66209I$	0
$u=\ \ 0.984173+0.497443I$ $a=\ \ 0.525993+0.587716I$ $b=-0.548453-0.164878I$	$-0.21065-4.60175I$	0
$u=\ \ 0.984173-0.497443I$ $a=\ \ 0.525993-0.587716I$ $b=-0.548453+0.164878I$	$-0.21065+4.60175I$	0
$u=\ \ 0.870051+0.679152I$ $a=-0.313124+0.500964I$ $b=-0.323064-0.402527I$	$2.87655-2.88564I$	0
$u=\ \ 0.870051-0.679152I$ $a=-0.313124-0.500964I$ $b=-0.323064+0.402527I$	$2.87655+2.88564I$	0
$u=-1.023420+0.414546I$ $a=-0.59669+2.65233I$ $b=-0.25466+1.43283I$	$-8.30031-2.14999I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.023420-0.414546I$ $a=-0.59669-2.65233I$ $b=-0.25466-1.43283I$	$-8.30031+2.14999I$	0
$u=-1.003530+0.468682I$ $a=-1.007460-0.720630I$ $b=-1.249210+0.598406I$	$0.280054+0.456269I$	0
$u=-1.003530-0.468682I$ $a=-1.007460+0.720630I$ $b=-1.249210-0.598406I$	$0.280054-0.456269I$	0
$u=-0.982907+0.512624I$ $a=\ \ 1.30656-2.51647I$ $b=-0.358370-1.078470I$	$0.86960+5.99499I$	0
$u=-0.982907-0.512624I$ $a=\ \ 1.30656+2.51647I$ $b=-0.358370+1.078470I$	$0.86960-5.99499I$	0
$u=\ \ 0.664022+0.902110I$ $a=\ \ 0.268917+0.282201I$ $b=-0.314378+0.879919I$	$2.10337-4.61954I$	0
$u=\ \ 0.664022-0.902110I$ $a=\ \ 0.268917-0.282201I$ $b=-0.314378-0.879919I$	$2.10337+4.61954I$	0
$u=\ \ 0.352863+1.065400I$ $a=-0.443332+0.605358I$ $b=\ \ 0.486671+1.071910I$	$-3.61595+4.69476I$	0
$u=\ \ 0.352863-1.065400I$ $a=-0.443332-0.605358I$ $b=\ \ 0.486671-1.071910I$	$-3.61595-4.69476I$	0
$u=\ \ 0.367583+0.796928I$ $a=\ \ 0.589023+0.487069I$ $b=-1.048850+0.291504I$	$-0.95048+8.79821I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.367583 - 0.796928I$ $a = 0.589023 - 0.487069I$ $b = -1.048850 - 0.291504I$	$-0.95048 - 8.79821I$	0
$u = 1.123410 + 0.148227I$ $a = 0.147814 + 0.129479I$ $b = -0.463378 - 0.322398I$	$-6.76781 - 1.75341I$	0
$u = 1.123410 - 0.148227I$ $a = 0.147814 - 0.129479I$ $b = -0.463378 + 0.322398I$	$-6.76781 + 1.75341I$	0
$u = 0.861289 + 0.741903I$ $a = -0.87342 - 1.18739I$ $b = 0.441231 - 0.715211I$	$-0.091216 + 0.552522I$	0
$u = 0.861289 - 0.741903I$ $a = -0.87342 + 1.18739I$ $b = 0.441231 + 0.715211I$	$-0.091216 - 0.552522I$	0
$u = 1.086500 + 0.349977I$ $a = 0.21485 - 2.17760I$ $b = 0.020473 - 1.231930I$	$-8.19104 - 3.38162I$	0
$u = 1.086500 - 0.349977I$ $a = 0.21485 + 2.17760I$ $b = 0.020473 + 1.231930I$	$-8.19104 + 3.38162I$	0
$u = 1.027750 + 0.501132I$ $a = 2.55206 + 1.43844I$ $b = -0.338256 + 1.215810I$	$-7.70017 - 8.42877I$	0
$u = 1.027750 - 0.501132I$ $a = 2.55206 - 1.43844I$ $b = -0.338256 - 1.215810I$	$-7.70017 + 8.42877I$	0
$u = 1.012670 + 0.531949I$ $a = -0.213014 + 1.212140I$ $b = -1.113660 + 0.102945I$	$0.56443 - 5.15617I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.012670 - 0.531949I$ $a = -0.213014 - 1.212140I$ $b = -1.113660 - 0.102945I$	$0.56443 + 5.15617I$	0
$u = -1.135000 + 0.178422I$ $a = 0.406463 + 0.890434I$ $b = 0.901111 - 0.067709I$	$-5.88446 - 6.20711I$	0
$u = -1.135000 - 0.178422I$ $a = 0.406463 - 0.890434I$ $b = 0.901111 + 0.067709I$	$-5.88446 + 6.20711I$	0
$u = -1.115390 + 0.308103I$ $a = -0.91644 + 1.59936I$ $b = -0.400309 + 1.255670I$	$-3.51682 - 0.04625I$	0
$u = -1.115390 - 0.308103I$ $a = -0.91644 - 1.59936I$ $b = -0.400309 - 1.255670I$	$-3.51682 + 0.04625I$	0
$u = 1.138060 + 0.232237I$ $a = -0.93177 - 2.34296I$ $b = -0.365094 - 1.318450I$	$-6.43755 + 3.41743I$	0
$u = 1.138060 - 0.232237I$ $a = -0.93177 + 2.34296I$ $b = -0.365094 + 1.318450I$	$-6.43755 - 3.41743I$	0
$u = -0.330093 + 0.769389I$ $a = -0.390812 - 0.649588I$ $b = 0.57301 - 1.31805I$	$-1.84585 - 6.20965I$	0
$u = -0.330093 - 0.769389I$ $a = -0.390812 + 0.649588I$ $b = 0.57301 + 1.31805I$	$-1.84585 + 6.20965I$	0
$u = -0.390387 + 0.731665I$ $a = -0.0947310 + 0.0770864I$ $b = -0.311756 + 1.136680I$	$-2.02526 + 0.37726I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.390387-0.731665I$ $a=-0.0947310-0.0770864I$ $b=-0.311756-1.136680I$	$-2.02526-0.37726I$	0
$u=-1.039380+0.546545I$ $a=\ \ 0.498307+0.650794I$ $b=\ \ 1.293830-0.347290I$	$1.66142+7.48678I$	0
$u=-1.039380-0.546545I$ $a=\ \ 0.498307-0.650794I$ $b=\ \ 1.293830+0.347290I$	$1.66142-7.48678I$	0
$u=-0.648891+0.507118I$ $a=-0.732167-0.973907I$ $b=\ \ 0.518833-0.948226I$	$1.93320-1.79902I$	0
$u=-0.648891-0.507118I$ $a=-0.732167+0.973907I$ $b=\ \ 0.518833+0.948226I$	$1.93320+1.79902I$	0
$u=\ \ 1.104650+0.426014I$ $a=-1.48771-1.81697I$ $b=\ \ 0.462698-1.325560I$	$-9.81624+0.99624I$	0
$u=\ \ 1.104650-0.426014I$ $a=-1.48771+1.81697I$ $b=\ \ 0.462698+1.325560I$	$-9.81624-0.99624I$	0
$u=-1.096900+0.446500I$ $a=\ \ 0.95320-1.83733I$ $b=\ \ 0.25057-1.58336I$	$-9.69077+8.37862I$	0
$u=-1.096900-0.446500I$ $a=\ \ 0.95320+1.83733I$ $b=\ \ 0.25057+1.58336I$	$-9.69077-8.37862I$	0
$u=-1.051180+0.550355I$ $a=-1.12587+1.48729I$ $b=\ \ 0.88961+1.25216I$	$-5.57613+6.49569I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.051180-0.550355I$ $a=-1.12587-1.48729I$ $b=\ \ 0.88961-1.25216I$	$-5.57613-6.49569I$	0
$u=-1.055240+0.551970I$ $a=-0.003634+0.617367I$ $b=\ \ 1.025790+0.254662I$	$-3.27346+6.74423I$	0
$u=-1.055240-0.551970I$ $a=-0.003634-0.617367I$ $b=\ \ 1.025790-0.254662I$	$-3.27346-6.74423I$	0
$u=-0.799610+0.891804I$ $a=\ \ 0.145253-0.185821I$ $b=\ \ 0.312267-0.830509I$	$-0.33983-3.80682I$	0
$u=-0.799610-0.891804I$ $a=\ \ 0.145253+0.185821I$ $b=\ \ 0.312267+0.830509I$	$-0.33983+3.80682I$	0
$u=-0.468435+0.645537I$ $a=\ \ 0.070806-0.956949I$ $b=-0.708818+0.071839I$	$-1.54515-2.05417I$	0
$u=-0.468435-0.645537I$ $a=\ \ 0.070806+0.956949I$ $b=-0.708818-0.071839I$	$-1.54515+2.05417I$	0
$u=\ \ 1.055420+0.594328I$ $a=\ \ 1.51699+2.46869I$ $b=-0.268183+1.081570I$	$-2.85988-9.70816I$	0
$u=\ \ 1.055420-0.594328I$ $a=\ \ 1.51699-2.46869I$ $b=-0.268183-1.081570I$	$-2.85988+9.70816I$	0
$u=\ \ 0.504912+0.601844I$ $a=-0.569631-0.252506I$ $b=\ \ 0.925046-0.071562I$	$2.03264+0.63861I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.504912 - 0.601844I$ $a = -0.569631 + 0.252506I$ $b = 0.925046 + 0.071562I$	$2.03264 - 0.63861I$	0
$u = -0.495482 + 0.608806I$ $a = 0.863460 - 1.011800I$ $b = -1.028980 - 0.423868I$	$3.26580 - 2.89404I$	0
$u = -0.495482 - 0.608806I$ $a = 0.863460 + 1.011800I$ $b = -1.028980 + 0.423868I$	$3.26580 + 2.89404I$	0
$u = -0.488278 + 0.604002I$ $a = -0.041005 - 0.887723I$ $b = -0.666559 + 1.091920I$	$-3.90652 - 1.88381I$	0
$u = -0.488278 - 0.604002I$ $a = -0.041005 + 0.887723I$ $b = -0.666559 - 1.091920I$	$-3.90652 + 1.88381I$	0
$u = -0.858231 + 0.873414I$ $a = 0.628898 - 0.604327I$ $b = -0.450774 - 0.932398I$	$-0.49636 + 10.15920I$	0
$u = -0.858231 - 0.873414I$ $a = 0.628898 + 0.604327I$ $b = -0.450774 + 0.932398I$	$-0.49636 - 10.15920I$	0
$u = -1.108730 + 0.520242I$ $a = 1.85998 - 0.96803I$ $b = -0.056669 - 0.926003I$	$-6.97607 + 3.98114I$	0
$u = -1.108730 - 0.520242I$ $a = 1.85998 + 0.96803I$ $b = -0.056669 + 0.926003I$	$-6.97607 - 3.98114I$	0
$u = -1.006440 + 0.702596I$ $a = -0.171521 - 0.425462I$ $b = -0.243608 + 0.604162I$	$-1.23044 + 7.33913I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.006440-0.702596I$ $a=-0.171521+0.425462I$ $b=-0.243608-0.604162I$	$-1.23044-7.33913I$	0
$u=1.109580+0.528391I$ $a=1.06762+2.02611I$ $b=-0.74657+1.25686I$	$-2.05189-7.59547I$	0
$u=1.109580-0.528391I$ $a=1.06762-2.02611I$ $b=-0.74657-1.25686I$	$-2.05189+7.59547I$	0
$u=-1.092170+0.571577I$ $a=-1.15218+1.62123I$ $b=0.47571+1.36734I$	$-4.07554+4.57508I$	0
$u=-1.092170-0.571577I$ $a=-1.15218-1.62123I$ $b=0.47571-1.36734I$	$-4.07554-4.57508I$	0
$u=-1.232800+0.072488I$ $a=0.49681-1.83437I$ $b=0.365136-1.277640I$	$-5.16632-6.17185I$	0
$u=-1.232800-0.072488I$ $a=0.49681+1.83437I$ $b=0.365136+1.277640I$	$-5.16632+6.17185I$	0
$u=1.123220+0.525229I$ $a=-0.940313-0.153598I$ $b=-0.849477-0.529011I$	$-1.90407-1.49651I$	0
$u=1.123220-0.525229I$ $a=-0.940313+0.153598I$ $b=-0.849477+0.529011I$	$-1.90407+1.49651I$	0
$u=-1.181400+0.391639I$ $a=1.08787-1.59805I$ $b=-0.616078-0.970757I$	$-8.04591+5.92997I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.181400-0.391639I$ $a=\ \ 1.08787+1.59805I$ $b=-0.616078+0.970757I$	$-8.04591-5.92997I$	0
$u=\ \ 1.150320+0.481785I$ $a=\ \ 0.86476+1.60291I$ $b=-0.307482+0.713035I$	$-0.76423-4.87203I$	0
$u=\ \ 1.150320-0.481785I$ $a=\ \ 0.86476-1.60291I$ $b=-0.307482-0.713035I$	$-0.76423+4.87203I$	0
$u=\ \ 1.190060+0.392650I$ $a=-0.196292-1.353840I$ $b=-0.323882-1.130810I$	$-8.00674-2.72764I$	0
$u=\ \ 1.190060-0.392650I$ $a=-0.196292+1.353840I$ $b=-0.323882+1.130810I$	$-8.00674+2.72764I$	0
$u=-0.289758+0.686660I$ $a=-0.048601+1.169220I$ $b=-0.415124+0.681082I$	$2.52438+1.38836I$	0
$u=-0.289758-0.686660I$ $a=-0.048601-1.169220I$ $b=-0.415124-0.681082I$	$2.52438-1.38836I$	0
$u=-1.129010+0.569138I$ $a=\ \ 1.34235-2.26774I$ $b=-0.58130-1.42417I$	$-4.19561+11.24720I$	0
$u=-1.129010-0.569138I$ $a=\ \ 1.34235+2.26774I$ $b=-0.58130+1.42417I$	$-4.19561-11.24720I$	0
$u=-1.101480+0.628453I$ $a=\ \ 1.42731-1.47585I$ $b=-0.489541-1.175260I$	$-3.15575+8.91297I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.101480-0.628453I$ $a=\ \ 1.42731+1.47585I$ $b=-0.489541+1.175260I$	$-3.15575-8.91297I$	0
$u=\ \ 1.125620+0.588687I$ $a=\ \ 0.500913-0.659325I$ $b=\ \ 1.207430+0.247995I$	$-3.2014-13.9871I$	0
$u=\ \ 1.125620-0.588687I$ $a=\ \ 0.500913+0.659325I$ $b=\ \ 1.207430-0.247995I$	$-3.2014+13.9871I$	0
$u=-1.143270+0.562048I$ $a=-0.65089+1.88526I$ $b=\ \ 0.260346+0.998301I$	$0.04894+3.45668I$	0
$u=-1.143270-0.562048I$ $a=-0.65089-1.88526I$ $b=\ \ 0.260346-0.998301I$	$0.04894-3.45668I$	0
$u=-1.126510+0.610015I$ $a=-0.118234-0.285480I$ $b=-0.792595+0.256486I$	$-3.69589+5.91340I$	0
$u=-1.126510-0.610015I$ $a=-0.118234+0.285480I$ $b=-0.792595-0.256486I$	$-3.69589-5.91340I$	0
$u=-0.656573+0.282210I$ $a=-0.620116+0.326275I$ $b=-0.347383+0.425260I$	$-1.177830+0.554388I$	0
$u=-0.656573-0.282210I$ $a=-0.620116-0.326275I$ $b=-0.347383-0.425260I$	$-1.177830-0.554388I$	0
$u=-0.588577+0.394784I$ $a=-1.076990+0.908184I$ $b=\ \ 1.084690+0.721689I$	$1.60264+3.32934I$	$6.18548+0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.588577-0.394784I$ $a=-1.076990-0.908184I$ $b=\ \ 1.084690-0.721689I$	$1.60264-3.32934I$	$6.18548+0.I$
$u=-0.293072+0.641560I$ $a=-1.120390+0.162745I$ $b=-0.159484-0.959539I$	$-4.63986+0.55817I$	$-7.38860+0.I$
$u=-0.293072-0.641560I$ $a=-1.120390-0.162745I$ $b=-0.159484+0.959539I$	$-4.63986-0.55817I$	$-7.38860+0.I$
$u=-1.222950+0.433474I$ $a=\ \ 0.28423-2.07272I$ $b=-0.633102-0.875296I$	$-2.88698+6.94632I$	0
$u=-1.222950-0.433474I$ $a=\ \ 0.28423+2.07272I$ $b=-0.633102+0.875296I$	$-2.88698-6.94632I$	0
$u=\ \ 0.566261+0.415378I$ $a=-1.21392-1.40032I$ $b=\ \ 0.156391+1.137680I$	$-6.21863+4.42335I$	$-7.46789-4.16553I$
$u=\ \ 0.566261-0.415378I$ $a=-1.21392+1.40032I$ $b=\ \ 0.156391-1.137680I$	$-6.21863-4.42335I$	$-7.46789+4.16553I$
$u=\ \ 1.137420+0.627599I$ $a=-1.11869-1.75008I$ $b=\ \ 0.69310-1.31971I$	$-1.5528-14.4058I$	0
$u=\ \ 1.137420-0.627599I$ $a=-1.11869+1.75008I$ $b=\ \ 0.69310+1.31971I$	$-1.5528+14.4058I$	0
$u=\ \ 0.255198+0.648434I$ $a=-0.457656+0.115156I$ $b=\ \ 0.665608+1.080140I$	$0.32056+3.02657I$	$0.-3.29197I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.255198 - 0.648434I$ $a = -0.457656 - 0.115156I$ $b = 0.665608 - 1.080140I$	$0.32056 - 3.02657I$	$0. + 3.29197I$
$u = 1.029950 + 0.820102I$ $a = 0.554770 + 0.389034I$ $b = 0.106143 + 0.814593I$	$1.04908 - 1.65636I$	0
$u = 1.029950 - 0.820102I$ $a = 0.554770 - 0.389034I$ $b = 0.106143 - 0.814593I$	$1.04908 + 1.65636I$	0
$u = 0.352816 + 0.565392I$ $a = -0.774383 + 0.366800I$ $b = 0.570908 + 0.286454I$	$1.61658 + 0.72125I$	$4.21730 + 1.21229I$
$u = 0.352816 - 0.565392I$ $a = -0.774383 - 0.366800I$ $b = 0.570908 - 0.286454I$	$1.61658 - 0.72125I$	$4.21730 - 1.21229I$
$u = -0.626810 + 0.177672I$ $a = 0.47870 + 2.91880I$ $b = 0.08431 + 1.44003I$	$-6.76022 + 5.20834I$	$-4.82259 - 5.76207I$
$u = -0.626810 - 0.177672I$ $a = 0.47870 - 2.91880I$ $b = 0.08431 - 1.44003I$	$-6.76022 - 5.20834I$	$-4.82259 + 5.76207I$
$u = -1.196370 + 0.629202I$ $a = -1.12787 + 1.90257I$ $b = 0.65973 + 1.32275I$	$-6.6187 + 20.5544I$	0
$u = -1.196370 - 0.629202I$ $a = -1.12787 - 1.90257I$ $b = 0.65973 - 1.32275I$	$-6.6187 - 20.5544I$	0
$u = 1.216300 + 0.605604I$ $a = -0.90718 - 1.80818I$ $b = 0.443883 - 1.322900I$	$-8.0436 - 11.6343I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.216300 - 0.605604I$ $a = -0.90718 + 1.80818I$ $b = 0.443883 + 1.322900I$	$-8.0436 + 11.6343I$	0
$u = 1.354970 + 0.189238I$ $a = 0.49967 + 1.73518I$ $b = 0.472680 + 1.253910I$	$-9.7829 + 10.9783I$	0
$u = 1.354970 - 0.189238I$ $a = 0.49967 - 1.73518I$ $b = 0.472680 - 1.253910I$	$-9.7829 - 10.9783I$	0
$u = 0.107722 + 0.611553I$ $a = -0.028426 - 0.735003I$ $b = 0.818313 - 0.725481I$	$0.70511 - 2.94977I$	$0.77816 + 5.38546I$
$u = 0.107722 - 0.611553I$ $a = -0.028426 + 0.735003I$ $b = 0.818313 + 0.725481I$	$0.70511 + 2.94977I$	$0.77816 - 5.38546I$
$u = 1.230940 + 0.664853I$ $a = 1.07152 + 1.65269I$ $b = -0.545595 + 1.159180I$	$-6.36772 - 10.89210I$	0
$u = 1.230940 - 0.664853I$ $a = 1.07152 - 1.65269I$ $b = -0.545595 - 1.159180I$	$-6.36772 + 10.89210I$	0
$u = -1.42005 + 0.27195I$ $a = 0.50841 - 1.59082I$ $b = 0.179495 - 1.147660I$	$-10.65500 - 1.52947I$	0
$u = -1.42005 - 0.27195I$ $a = 0.50841 + 1.59082I$ $b = 0.179495 + 1.147660I$	$-10.65500 + 1.52947I$	0
$u = 0.007192 + 0.508226I$ $a = 1.48448 + 0.16026I$ $b = -0.172573 - 1.339150I$	$-6.97969 - 4.66343I$	$-6.67994 + 4.47542I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.007192 - 0.508226I$ $a = 1.48448 - 0.16026I$ $b = -0.172573 + 1.339150I$	$-6.97969 + 4.66343I$	$-6.67994 - 4.47542I$
$u = -1.48292 + 0.18695I$ $a = -0.15328 + 1.62185I$ $b = -0.297661 + 1.043810I$	$-10.10840 - 0.30685I$	0
$u = -1.48292 - 0.18695I$ $a = -0.15328 - 1.62185I$ $b = -0.297661 - 1.043810I$	$-10.10840 + 0.30685I$	0
$u = 1.53362 + 0.04871I$ $a = 0.07298 - 1.45600I$ $b = -0.080460 - 0.876805I$	$-8.91789 + 1.28366I$	0
$u = 1.53362 - 0.04871I$ $a = 0.07298 + 1.45600I$ $b = -0.080460 + 0.876805I$	$-8.91789 - 1.28366I$	0
$u = 0.353993 + 0.091545I$ $a = 0.576585 + 0.325449I$ $b = 0.777233 - 0.742897I$	$0.89957 - 2.81238I$	$-4.80695 + 6.22775I$
$u = 0.353993 - 0.091545I$ $a = 0.576585 - 0.325449I$ $b = 0.777233 + 0.742897I$	$0.89957 + 2.81238I$	$-4.80695 - 6.22775I$

II. $I_2^u = \langle 7.71 \times 10^{10} u^{45} - 4.91 \times 10^{10} u^{44} + \cdots + 3.19 \times 10^{10} b - 4.82 \times 10^{11},\ -3.32 \times 10^{11} u^{45} - 5.47 \times 10^{11} u^{44} + \cdots + 3.19 \times 10^{10} a + 4.78 \times 10^{11},\ u^{46} - 14u^{44} + \cdots + 3u + 1 \rangle$

(i) Arc colorings

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

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

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 10.3976u^{45} + 17.1270u^{44} + \cdots - 50.0506u - 14.9852 \\ -2.41311u^{45} + 1.53651u^{44} + \cdots + 59.7551u + 15.0925 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 37.3731u^{45} + 48.7727u^{44} + \cdots - 145.343u - 43.4124 \\ 17.5615u^{45} + 18.0553u^{44} + \cdots - 107.919u - 29.7649 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -4.18561u^{45} - 29.3387u^{44} + \cdots - 71.3477u - 11.7973 \\ 10.8236u^{45} - 1.23253u^{44} + \cdots - 34.6891u - 9.05060 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 15.1278u^{45} + 38.0763u^{44} + \cdots - 65.2261u - 25.2324 \\ 1.25081u^{45} + 9.13970u^{44} + \cdots - 56.0878u - 16.6770 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 12.8107u^{45} + 15.5905u^{44} + \cdots - 109.806u - 30.0777 \\ -2.41311u^{45} + 1.53651u^{44} + \cdots + 59.7551u + 15.0925 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 56.1218u^{45} + 33.8772u^{44} + \cdots - 294.780u - 73.6228 \\ 20.4014u^{45} + 12.0171u^{44} + \cdots - 24.1839u - 3.82965 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -6.58372u^{45} - 11.4548u^{44} + \cdots + 99.8440u + 25.0471 \\ -27.9650u^{45} - 35.3715u^{44} + \cdots + 98.8917u + 27.0793 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$$= \frac{89030218431}{31929802369}u^{45} + \frac{970483410583}{31929802369}u^{44} + \cdots + \frac{11015325856943}{31929802369}u + \frac{2629114158335}{31929802369}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{46} - 28u^{45} + \cdots - 17u + 1$
c_2	$u^{46} - 14u^{44} + \cdots - 3u + 1$
c_3	$u^{46} + u^{45} + \cdots + 132u + 11$
c_4	$u^{46} + u^{45} + \cdots + 4u + 1$
c_5	$u^{46} - u^{45} + \cdots + 18u + 1$
c_6	$u^{46} - u^{45} + \cdots + 3u + 1$
c_7	$u^{46} - 14u^{44} + \cdots + 3u + 1$
c_8	$u^{46} + 3u^{45} + \cdots + 12u + 1$
c_9	$u^{46} + 4u^{45} + \cdots - u + 1$
c_{10}	$u^{46} + u^{45} + \cdots - 3u + 1$
c_{11}	$u^{46} - u^{45} + \cdots - 2u + 1$
c_{12}	$u^{46} + u^{45} + \cdots - 18u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{46} - 4y^{45} + \cdots + 47y + 1$
c_2, c_7	$y^{46} - 28y^{45} + \cdots - 17y + 1$
c_3	$y^{46} - 7y^{45} + \cdots - 10582y + 121$
c_4	$y^{46} - 19y^{45} + \cdots + 4y + 1$
c_5, c_{12}	$y^{46} - 43y^{45} + \cdots - 98y + 1$
c_6, c_{10}	$y^{46} + 27y^{45} + \cdots + 35y + 1$
c_8	$y^{46} - 21y^{45} + \cdots + 68y + 1$
c_9	$y^{46} + 12y^{45} + \cdots + 23y + 1$
c_{11}	$y^{46} - 9y^{45} + \cdots - 10y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.967242+0.259496I$ $a=\ 1.05380-3.35382I$ $b=\ 0.125565-1.393460I$	$-8.03600-3.76090I$	$-11.49389+4.80109I$
$u=-0.967242-0.259496I$ $a=\ 1.05380+3.35382I$ $b=\ 0.125565+1.393460I$	$-8.03600+3.76090I$	$-11.49389-4.80109I$
$u=\ 0.429921+0.906941I$ $a=\ 0.440586-0.686873I$ $b=-0.422994-1.122700I$	$-2.69565+4.90056I$	$-4.75531-6.01424I$
$u=\ 0.429921-0.906941I$ $a=\ 0.440586+0.686873I$ $b=-0.422994+1.122700I$	$-2.69565-4.90056I$	$-4.75531+6.01424I$
$u=\ 0.725204+0.693954I$ $a=-0.276536+0.224180I$ $b=-0.245515+0.502452I$	$2.33974-3.60285I$	$-0.61269+4.95954I$
$u=\ 0.725204-0.693954I$ $a=-0.276536-0.224180I$ $b=-0.245515-0.502452I$	$2.33974+3.60285I$	$-0.61269-4.95954I$
$u=-0.939292+0.214126I$ $a=-0.670956-1.221050I$ $b=-0.006621-1.329610I$	$-7.85483+5.69821I$	$-11.15488-7.28120I$
$u=-0.939292-0.214126I$ $a=-0.670956+1.221050I$ $b=-0.006621+1.329610I$	$-7.85483-5.69821I$	$-11.15488+7.28120I$
$u=\ 0.988081+0.348862I$ $a=\ 0.65953+1.62479I$ $b=\ 0.49449+1.47775I$	$-6.77873+0.13867I$	$-0.84845+1.77413I$
$u=\ 0.988081-0.348862I$ $a=\ 0.65953-1.62479I$ $b=\ 0.49449-1.47775I$	$-6.77873-0.13867I$	$-0.84845-1.77413I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.041620 + 0.309578I$ $a = -2.14648 - 2.83300I$ $b = 0.204092 - 0.739022I$	$-5.19056 - 6.65225I$	$-9.73982 + 9.73034I$
$u = 1.041620 - 0.309578I$ $a = -2.14648 + 2.83300I$ $b = 0.204092 + 0.739022I$	$-5.19056 + 6.65225I$	$-9.73982 - 9.73034I$
$u = 0.996864 + 0.468531I$ $a = 1.127250 - 0.469028I$ $b = 1.183350 + 0.615781I$	$0.239315 - 0.043472I$	$0. - 8.33527I$
$u = 0.996864 - 0.468531I$ $a = 1.127250 + 0.469028I$ $b = 1.183350 - 0.615781I$	$0.239315 + 0.043472I$	$0. + 8.33527I$
$u = 0.856514 + 0.251703I$ $a = 0.62668 + 2.79288I$ $b = -0.24475 + 1.47466I$	$-6.12295 - 2.65789I$	$-5.21741 + 10.16383I$
$u = 0.856514 - 0.251703I$ $a = 0.62668 - 2.79288I$ $b = -0.24475 - 1.47466I$	$-6.12295 + 2.65789I$	$-5.21741 - 10.16383I$
$u = -0.996485 + 0.490399I$ $a = -0.151455 + 1.401610I$ $b = 1.109930 + 0.263672I$	$0.37946 + 5.76027I$	$-2.0000 - 14.3388I$
$u = -0.996485 - 0.490399I$ $a = -0.151455 - 1.401610I$ $b = 1.109930 - 0.263672I$	$0.37946 - 5.76027I$	$-2.0000 + 14.3388I$
$u = -0.729085 + 0.854559I$ $a = 0.972569 - 0.204713I$ $b = -0.177552 - 0.646493I$	$-0.55218 - 2.11050I$	$-6.77517 + 6.77743I$
$u = -0.729085 - 0.854559I$ $a = 0.972569 + 0.204713I$ $b = -0.177552 + 0.646493I$	$-0.55218 + 2.11050I$	$-6.77517 - 6.77743I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.805306 + 0.280716I$ $a = 1.96923 + 2.19082I$ $b = -0.194423 - 0.603030I$	$-4.28569 + 4.16900I$	$-0.96371 - 4.22019I$
$u = 0.805306 - 0.280716I$ $a = 1.96923 - 2.19082I$ $b = -0.194423 + 0.603030I$	$-4.28569 - 4.16900I$	$-0.96371 + 4.22019I$
$u = -0.688261 + 0.466101I$ $a = 0.594536 - 0.754409I$ $b = -0.820598 + 0.244677I$	$1.44422 - 1.78366I$	$2.52994 + 3.89108I$
$u = -0.688261 - 0.466101I$ $a = 0.594536 + 0.754409I$ $b = -0.820598 - 0.244677I$	$1.44422 + 1.78366I$	$2.52994 - 3.89108I$
$u = -1.058940 + 0.544011I$ $a = -1.18927 + 1.32788I$ $b = 0.787281 + 1.122690I$	$-5.22806 + 6.48862I$	0
$u = -1.058940 - 0.544011I$ $a = -1.18927 - 1.32788I$ $b = 0.787281 - 1.122690I$	$-5.22806 - 6.48862I$	0
$u = -0.962805 + 0.706764I$ $a = -0.375508 + 0.233471I$ $b = 0.065716 - 0.538154I$	$-1.28663 + 7.88982I$	0
$u = -0.962805 - 0.706764I$ $a = -0.375508 - 0.233471I$ $b = 0.065716 + 0.538154I$	$-1.28663 - 7.88982I$	0
$u = 0.665853 + 0.423392I$ $a = 0.557072 + 0.755875I$ $b = -0.999022 + 0.734436I$	$1.36692 - 3.73506I$	$-1.74396 + 12.46346I$
$u = 0.665853 - 0.423392I$ $a = 0.557072 - 0.755875I$ $b = -0.999022 - 0.734436I$	$1.36692 + 3.73506I$	$-1.74396 - 12.46346I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.140820+0.451564I$ $a=-0.74590+2.11225I$ $b=\ \ 0.430389+0.932359I$	$-0.89501+5.66556I$	0
$u=-1.140820-0.451564I$ $a=-0.74590-2.11225I$ $b=\ \ 0.430389-0.932359I$	$-0.89501-5.66556I$	0
$u=\ \ 1.008510+0.746406I$ $a=\ \ 0.628091+0.548655I$ $b=\ \ 0.075039+0.606986I$	$1.47367-1.93340I$	0
$u=\ \ 1.008510-0.746406I$ $a=\ \ 0.628091-0.548655I$ $b=\ \ 0.075039-0.606986I$	$1.47367+1.93340I$	0
$u=\ \ 1.130090+0.619557I$ $a=-1.39088-1.92423I$ $b=\ \ 0.460826-1.277380I$	$-4.86841-10.47860I$	0
$u=\ \ 1.130090-0.619557I$ $a=-1.39088+1.92423I$ $b=\ \ 0.460826+1.277380I$	$-4.86841+10.47860I$	0
$u=-0.538641+0.383684I$ $a=\ \ 1.055000+0.512454I$ $b=-0.594032+0.752150I$	$1.23640-2.06191I$	$-2.40525+1.66559I$
$u=-0.538641-0.383684I$ $a=\ \ 1.055000-0.512454I$ $b=-0.594032-0.752150I$	$1.23640+2.06191I$	$-2.40525-1.66559I$
$u=-0.272756+0.568907I$ $a=\ \ 0.977129-0.948003I$ $b=-0.524855+0.934111I$	$-3.33196-1.98343I$	$-1.28839+4.06659I$
$u=-0.272756-0.568907I$ $a=\ \ 0.977129+0.948003I$ $b=-0.524855-0.934111I$	$-3.33196+1.98343I$	$-1.28839-4.06659I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.48090 + 0.03553I$ $a = 0.017265 + 1.379330I$ $b = 0.165014 + 0.984511I$	$-9.38977 - 0.36803I$	0
$u = 1.48090 - 0.03553I$ $a = 0.017265 - 1.379330I$ $b = 0.165014 - 0.984511I$	$-9.38977 + 0.36803I$	0
$u = -1.47989 + 0.12531I$ $a = 0.13181 - 1.74157I$ $b = 0.168012 - 0.978347I$	$-9.37086 - 1.69923I$	0
$u = -1.47989 - 0.12531I$ $a = 0.13181 + 1.74157I$ $b = 0.168012 + 0.978347I$	$-9.37086 + 1.69923I$	0
$u = -0.354643 + 0.364408I$ $a = 0.63642 - 2.05065I$ $b = -0.539342 + 0.857540I$	$-3.32459 - 2.00115I$	$-2.41651 + 4.47631I$
$u = -0.354643 - 0.364408I$ $a = 0.63642 + 2.05065I$ $b = -0.539342 - 0.857540I$	$-3.32459 + 2.00115I$	$-2.41651 - 4.47631I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{46}-28u^{45}+\cdots-17u+1)$ $\cdot(u^{177}+89u^{176}+\cdots+1149811u+32761)$
c_2	$(u^{46}-14u^{44}+\cdots-3u+1)(u^{177}+u^{176}+\cdots-113u+181)$
c_3	$(u^{46}+u^{45}+\cdots+132u+11)$ $\cdot(u^{177}+16u^{175}+\cdots+2770141136u+148430897)$
c_4	$(u^{46}+u^{45}+\cdots+4u+1)(u^{177}+2u^{176}+\cdots-118u-47)$
c_5	$(u^{46}-u^{45}+\cdots+18u+1)(u^{177}-68u^{175}+\cdots-8904u+467)$
c_6	$(u^{46}-u^{45}+\cdots+3u+1)(u^{177}+51u^{175}+\cdots+1008921u+96053)$
c_7	$(u^{46}-14u^{44}+\cdots+3u+1)(u^{177}+u^{176}+\cdots-113u+181)$
c_8	$(u^{46}+3u^{45}+\cdots+12u+1)(u^{177}-10u^{176}+\cdots+224156u+83191)$
c_9	$(u^{46}+4u^{45}+\cdots-u+1)(u^{177}+13u^{176}+\cdots-3396057u-216341)$
c_{10}	$(u^{46}+u^{45}+\cdots-3u+1)(u^{177}+51u^{175}+\cdots+1008921u+96053)$
c_{11}	$(u^{46}-u^{45}+\cdots-2u+1)(u^{177}-4u^{176}+\cdots-500u+41)$
c_{12}	$(u^{46}+u^{45}+\cdots-18u+1)(u^{177}-68u^{175}+\cdots-8904u+467)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{46}-4y^{45}+\cdots+47y+1)$ $\cdot(y^{177}+15y^{176}+\cdots+55508891787y-1073283121)$
c_2, c_7	$(y^{46}-28y^{45}+\cdots-17y+1)$ $\cdot(y^{177}-89y^{176}+\cdots+1149811y-32761)$
c_3	$(y^{46}-7y^{45}+\cdots-10582y+121)$ $\cdot(y^{177}+32y^{176}+\cdots-268829528448372104y-22031731184224609)$
c_4	$(y^{46}-19y^{45}+\cdots+4y+1)(y^{177}-32y^{176}+\cdots+102002y-2209)$
c_5, c_{12}	$(y^{46}-43y^{45}+\cdots-98y+1)$ $\cdot(y^{177}-136y^{176}+\cdots-143543164y-218089)$
c_6, c_{10}	$(y^{46}+27y^{45}+\cdots+35y+1)$ $\cdot(y^{177}+102y^{176}+\cdots-436351764825y-9226178809)$
c_8	$(y^{46}-21y^{45}+\cdots+68y+1)$ $\cdot(y^{177}-30y^{176}+\cdots+663714149210y-6920742481)$
c_9	$(y^{46}+12y^{45}+\cdots+23y+1)$ $\cdot(y^{177}+43y^{176}+\cdots-5046528559981y-46803428281)$
c_{11}	$(y^{46}-9y^{45}+\cdots-10y+1)(y^{177}-14y^{176}+\cdots+185384y-1681)$