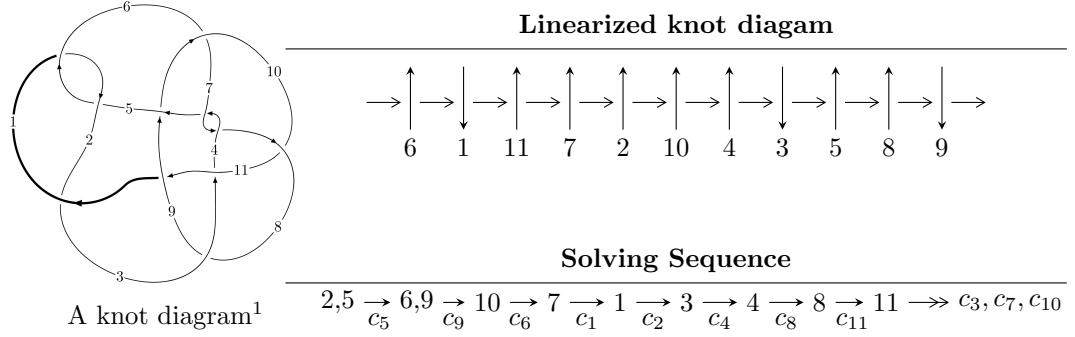


$11a_{136}$ ($K11a_{136}$)



Ideals for irreducible components² of X_{par}

$$\begin{aligned}
 I_1^u &= \langle -2.54340 \times 10^{142} u^{97} + 2.06865 \times 10^{143} u^{96} + \dots + 1.58059 \times 10^{143} b + 1.85123 \times 10^{144}, \\
 &\quad 3.46727 \times 10^{144} u^{97} - 3.34809 \times 10^{144} u^{96} + \dots + 2.05476 \times 10^{144} a + 2.15518 \times 10^{145}, \\
 &\quad u^{98} - 2u^{97} + \dots - 37u + 13 \rangle \\
 I_2^u &= \langle u^{16} - u^{15} + 4u^{14} - 4u^{13} + 8u^{12} - 8u^{11} + 9u^{10} - 11u^9 + 6u^8 - 10u^7 + 2u^6 - 7u^5 - 4u^3 + b, \\
 &\quad - 23u^{16} + 8u^{15} + \dots + 11a + 8, \\
 &\quad u^{17} - u^{16} + 4u^{15} - 4u^{14} + 9u^{13} - 9u^{12} + 12u^{11} - 14u^{10} + 11u^9 - 15u^8 + 6u^7 - 13u^6 + 2u^5 - 8u^4 - 3u^2 - 1 \rangle
 \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 115 representations.

¹The image of knot diagram is generated by the software “**Draw programme**” developed by Andrew Bartholomew(<http://www.layer8.co.uk/math/draw/index.htm#Running-draw>), where we modified some parts for our purpose(<https://github.com/CATsTAILs/LinksPainter>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

$$\text{I. } I_1^u = \langle -2.54 \times 10^{142}u^{97} + 2.07 \times 10^{143}u^{96} + \dots + 1.58 \times 10^{143}b + 1.85 \times 10^{144}, \ 3.47 \times 10^{144}u^{97} - 3.35 \times 10^{144}u^{96} + \dots + 2.05 \times 10^{144}a + 2.16 \times 10^{145}, \ u^{98} - 2u^{97} + \dots - 37u + 13 \rangle$$

(i) **Arc colorings**

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

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} -1.68743u^{97} + 1.62943u^{96} + \dots - 16.4025u - 10.4887 \\ 0.160915u^{97} - 1.30878u^{96} + \dots + 26.4937u - 11.7123 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.52651u^{97} + 0.320645u^{96} + \dots + 10.0912u - 22.2010 \\ 0.160915u^{97} - 1.30878u^{96} + \dots + 26.4937u - 11.7123 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 2.32231u^{97} - 4.60219u^{96} + \dots + 99.7785u - 27.3089 \\ -0.467847u^{97} + 0.927386u^{96} + \dots - 17.2220u + 8.26210 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.193677u^{97} + 0.576173u^{96} + \dots - 24.8261u + 19.1249 \\ 0.836899u^{97} - 0.622249u^{96} + \dots - 0.896403u + 7.44199 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.993944u^{97} - 0.792161u^{96} + \dots + 32.8044u - 33.0338 \\ 0.200388u^{97} - 0.948050u^{96} + \dots + 20.9776u - 8.91727 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -1.97538u^{97} + 3.67562u^{96} + \dots - 51.3552u + 15.4260 \\ 0.110979u^{97} + 0.369014u^{96} + \dots - 8.13883u + 4.87331 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -1.97538u^{97} + 3.67562u^{96} + \dots - 51.3552u + 15.4260 \\ 0.110979u^{97} + 0.369014u^{96} + \dots - 8.13883u + 4.87331 \end{pmatrix}$$

(ii) **Obstruction class** = -1

(iii) **Cusp Shapes** = $-1.93838u^{97} + 4.28511u^{96} + \dots - 151.895u + 50.7800$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{98} - 2u^{97} + \cdots - 37u + 13$
c_2	$u^{98} + 38u^{97} + \cdots + 3909u + 169$
c_3	$u^{98} + 8u^{97} + \cdots - 2079u - 121$
c_4, c_7	$u^{98} + 4u^{97} + \cdots + 23u + 1$
c_6	$u^{98} + u^{97} + \cdots - 35u - 1$
c_8	$u^{98} + u^{97} + \cdots - 3372u + 329$
c_9	$u^{98} + u^{97} + \cdots - 1099u + 29$
c_{10}	$u^{98} - 6u^{97} + \cdots - 80u - 3$
c_{11}	$u^{98} + 7u^{97} + \cdots - 291u + 55$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{98} + 38y^{97} + \cdots + 3909y + 169$
c_2	$y^{98} + 42y^{97} + \cdots - 1253619y + 28561$
c_3	$y^{98} + 20y^{97} + \cdots - 1311277y + 14641$
c_4, c_7	$y^{98} + 70y^{97} + \cdots + 101y + 1$
c_6	$y^{98} + 3y^{97} + \cdots - 177y + 1$
c_8	$y^{98} + 19y^{97} + \cdots + 5038820y + 108241$
c_9	$y^{98} + 9y^{97} + \cdots - 1350887y + 841$
c_{10}	$y^{98} + 10y^{97} + \cdots - 178y + 9$
c_{11}	$y^{98} + 3y^{97} + \cdots - 70161y + 3025$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.616891 + 0.784397I$		
$a = 1.63832 - 0.64003I$	$-0.34672 - 2.97837I$	0
$b = -1.090670 + 0.712199I$		
$u = 0.616891 - 0.784397I$		
$a = 1.63832 + 0.64003I$	$-0.34672 + 2.97837I$	0
$b = -1.090670 - 0.712199I$		
$u = -0.659764 + 0.754623I$		
$a = -2.07220 - 1.28632I$	$0.55151 + 3.39643I$	0
$b = 1.75363 - 0.61398I$		
$u = -0.659764 - 0.754623I$		
$a = -2.07220 + 1.28632I$	$0.55151 - 3.39643I$	0
$b = 1.75363 + 0.61398I$		
$u = -0.496333 + 0.874547I$		
$a = -0.295450 - 0.901782I$	$-4.93867 - 2.00874I$	0
$b = -0.138248 - 1.273140I$		
$u = -0.496333 - 0.874547I$		
$a = -0.295450 + 0.901782I$	$-4.93867 + 2.00874I$	0
$b = -0.138248 + 1.273140I$		
$u = 0.575791 + 0.810573I$		
$a = 1.97739 - 0.70589I$	$2.03874 + 0.53848I$	0
$b = -0.88079 - 1.49324I$		
$u = 0.575791 - 0.810573I$		
$a = 1.97739 + 0.70589I$	$2.03874 - 0.53848I$	0
$b = -0.88079 + 1.49324I$		
$u = -0.867975 + 0.478153I$		
$a = -0.836099 - 0.480262I$	$1.79924 + 3.99333I$	0
$b = 0.800077 + 0.888595I$		
$u = -0.867975 - 0.478153I$		
$a = -0.836099 + 0.480262I$	$1.79924 - 3.99333I$	0
$b = 0.800077 - 0.888595I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.632212 + 0.756505I$		
$a = -1.49685 + 0.04096I$	$1.56819 + 1.66106I$	0
$b = 0.597802 + 0.996584I$		
$u = 0.632212 - 0.756505I$		
$a = -1.49685 - 0.04096I$	$1.56819 - 1.66106I$	0
$b = 0.597802 - 0.996584I$		
$u = -0.641246 + 0.799243I$		
$a = -1.013500 - 0.151324I$	$3.77490 - 0.59504I$	0
$b = 0.905379 + 0.476067I$		
$u = -0.641246 - 0.799243I$		
$a = -1.013500 + 0.151324I$	$3.77490 + 0.59504I$	0
$b = 0.905379 - 0.476067I$		
$u = -0.010475 + 1.028500I$		
$a = 0.405801 - 0.744711I$	$-7.68730 - 2.02568I$	0
$b = 0.58430 - 1.48647I$		
$u = -0.010475 - 1.028500I$		
$a = 0.405801 + 0.744711I$	$-7.68730 + 2.02568I$	0
$b = 0.58430 + 1.48647I$		
$u = -0.440846 + 0.934645I$		
$a = 1.84346 - 0.35760I$	$-4.98729 - 2.56981I$	0
$b = -0.231373 + 0.603261I$		
$u = -0.440846 - 0.934645I$		
$a = 1.84346 + 0.35760I$	$-4.98729 + 2.56981I$	0
$b = -0.231373 - 0.603261I$		
$u = 0.728651 + 0.628934I$		
$a = 1.11245 - 1.65306I$	$-2.36351 - 2.54757I$	0
$b = -1.25852 + 1.13921I$		
$u = 0.728651 - 0.628934I$		
$a = 1.11245 + 1.65306I$	$-2.36351 + 2.54757I$	0
$b = -1.25852 - 1.13921I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.579700 + 0.891928I$		
$a = -0.246451 + 1.116290I$	$1.77426 + 4.06198I$	0
$b = 1.31896 - 1.31067I$		
$u = 0.579700 - 0.891928I$		
$a = -0.246451 - 1.116290I$	$1.77426 - 4.06198I$	0
$b = 1.31896 + 1.31067I$		
$u = -0.103181 + 1.061710I$		
$a = 0.049091 - 0.616224I$	$-3.62579 + 0.91604I$	0
$b = -0.343876 - 0.957178I$		
$u = -0.103181 - 1.061710I$		
$a = 0.049091 + 0.616224I$	$-3.62579 - 0.91604I$	0
$b = -0.343876 + 0.957178I$		
$u = -1.011860 + 0.341309I$		
$a = -0.260991 + 0.539760I$	$-2.16870 - 6.86474I$	0
$b = 0.436256 - 0.655494I$		
$u = -1.011860 - 0.341309I$		
$a = -0.260991 - 0.539760I$	$-2.16870 + 6.86474I$	0
$b = 0.436256 + 0.655494I$		
$u = -0.934536 + 0.546067I$		
$a = 0.851904 + 0.819370I$	$4.03924 + 6.33189I$	0
$b = -0.979519 - 0.722317I$		
$u = -0.934536 - 0.546067I$		
$a = 0.851904 - 0.819370I$	$4.03924 - 6.33189I$	0
$b = -0.979519 + 0.722317I$		
$u = 0.929871 + 0.556246I$		
$a = -0.824388 + 1.097890I$	$-0.99305 - 12.05120I$	0
$b = 1.00104 - 1.18467I$		
$u = 0.929871 - 0.556246I$		
$a = -0.824388 - 1.097890I$	$-0.99305 + 12.05120I$	0
$b = 1.00104 + 1.18467I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.607517 + 0.904806I$		
$a = -2.05552 + 1.58210I$	$-0.72330 + 7.80017I$	0
$b = 0.895894 + 0.828879I$		
$u = 0.607517 - 0.904806I$		
$a = -2.05552 - 1.58210I$	$-0.72330 - 7.80017I$	0
$b = 0.895894 - 0.828879I$		
$u = 0.829244 + 0.372367I$		
$a = -0.920831 + 0.041802I$	$1.68869 + 0.41507I$	0
$b = 0.708117 + 0.178322I$		
$u = 0.829244 - 0.372367I$		
$a = -0.920831 - 0.041802I$	$1.68869 - 0.41507I$	0
$b = 0.708117 - 0.178322I$		
$u = -0.637715 + 0.885907I$		
$a = 1.24620 + 1.12869I$	$3.50961 - 4.39996I$	0
$b = -0.625446 + 0.651293I$		
$u = -0.637715 - 0.885907I$		
$a = 1.24620 - 1.12869I$	$3.50961 + 4.39996I$	0
$b = -0.625446 - 0.651293I$		
$u = 0.650522 + 0.909255I$		
$a = 0.234450 - 0.779015I$	$1.10819 + 3.36665I$	0
$b = -0.934084 + 0.714480I$		
$u = 0.650522 - 0.909255I$		
$a = 0.234450 + 0.779015I$	$1.10819 - 3.36665I$	0
$b = -0.934084 - 0.714480I$		
$u = -0.637437 + 0.925557I$		
$a = 1.30512 + 1.42138I$	$0.02639 - 8.44572I$	0
$b = -2.00689 - 0.34640I$		
$u = -0.637437 - 0.925557I$		
$a = 1.30512 - 1.42138I$	$0.02639 + 8.44572I$	0
$b = -2.00689 + 0.34640I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.961805 + 0.599639I$		
$a = 0.443570 - 0.416648I$	$3.94411 + 0.60196I$	0
$b = -0.610119 + 0.559112I$		
$u = 0.961805 - 0.599639I$		
$a = 0.443570 + 0.416648I$	$3.94411 - 0.60196I$	0
$b = -0.610119 - 0.559112I$		
$u = -0.750684 + 0.850677I$		
$a = 0.996395 - 0.701894I$	$1.41987 - 2.83130I$	0
$b = 0.18373 + 1.73138I$		
$u = -0.750684 - 0.850677I$		
$a = 0.996395 + 0.701894I$	$1.41987 + 2.83130I$	0
$b = 0.18373 - 1.73138I$		
$u = -0.628456 + 0.577625I$		
$a = -1.49021 - 0.91464I$	$0.88936 + 2.15076I$	0
$b = 0.661533 + 0.370633I$		
$u = -0.628456 - 0.577625I$		
$a = -1.49021 + 0.91464I$	$0.88936 - 2.15076I$	0
$b = 0.661533 - 0.370633I$		
$u = -0.147876 + 1.137580I$		
$a = 0.790358 + 0.086392I$	$-7.72343 + 2.40963I$	0
$b = 0.390050 + 1.205370I$		
$u = -0.147876 - 1.137580I$		
$a = 0.790358 - 0.086392I$	$-7.72343 - 2.40963I$	0
$b = 0.390050 - 1.205370I$		
$u = 0.354450 + 0.773791I$		
$a = -1.56361 + 0.74448I$	$0.304324 - 0.169063I$	0
$b = 1.330170 + 0.217693I$		
$u = 0.354450 - 0.773791I$		
$a = -1.56361 - 0.74448I$	$0.304324 + 0.169063I$	0
$b = 1.330170 - 0.217693I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.788593 + 0.839284I$		
$a = 0.246563 + 0.731308I$	$-0.34003 + 2.94218I$	0
$b = -0.215213 - 0.162213I$		
$u = 0.788593 - 0.839284I$		
$a = 0.246563 - 0.731308I$	$-0.34003 - 2.94218I$	0
$b = -0.215213 + 0.162213I$		
$u = 0.254437 + 1.134610I$		
$a = -0.363254 - 1.220330I$	$-6.20840 - 0.89525I$	0
$b = -0.069590 - 0.950170I$		
$u = 0.254437 - 1.134610I$		
$a = -0.363254 + 1.220330I$	$-6.20840 + 0.89525I$	0
$b = -0.069590 + 0.950170I$		
$u = 0.518432 + 1.055200I$		
$a = 1.046680 - 0.838479I$	$-1.13902 + 3.74818I$	0
$b = -1.019190 - 0.586216I$		
$u = 0.518432 - 1.055200I$		
$a = 1.046680 + 0.838479I$	$-1.13902 - 3.74818I$	0
$b = -1.019190 + 0.586216I$		
$u = 0.542877 + 1.044420I$		
$a = -1.82901 + 0.24250I$	$-4.35388 + 7.97905I$	0
$b = 0.092857 + 0.401634I$		
$u = 0.542877 - 1.044420I$		
$a = -1.82901 - 0.24250I$	$-4.35388 - 7.97905I$	0
$b = 0.092857 - 0.401634I$		
$u = -0.622357 + 1.013960I$		
$a = 1.75460 + 0.58940I$	$-0.37194 - 7.12003I$	0
$b = -0.969529 + 0.647486I$		
$u = -0.622357 - 1.013960I$		
$a = 1.75460 - 0.58940I$	$-0.37194 + 7.12003I$	0
$b = -0.969529 - 0.647486I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.750313 + 0.925840I$		
$a = 1.013880 - 0.893072I$	$-3.57391 - 2.88241I$	0
$b = -0.101119 + 1.137440I$		
$u = -0.750313 - 0.925840I$		
$a = 1.013880 + 0.893072I$	$-3.57391 + 2.88241I$	0
$b = -0.101119 - 1.137440I$		
$u = -0.585650 + 1.051210I$		
$a = -1.77104 - 0.63001I$	$-4.95576 - 9.43405I$	0
$b = 1.13257 - 1.51324I$		
$u = -0.585650 - 1.051210I$		
$a = -1.77104 + 0.63001I$	$-4.95576 + 9.43405I$	0
$b = 1.13257 + 1.51324I$		
$u = 0.665170 + 1.011220I$		
$a = -2.34754 + 0.55326I$	$-3.49613 + 7.89288I$	0
$b = 1.35506 + 1.45199I$		
$u = 0.665170 - 1.011220I$		
$a = -2.34754 - 0.55326I$	$-3.49613 - 7.89288I$	0
$b = 1.35506 - 1.45199I$		
$u = 0.315902 + 0.719037I$		
$a = 2.50104 - 1.03660I$	$-2.69442 - 4.06632I$	$-0.58437 + 4.03909I$
$b = 0.448777 - 0.181262I$		
$u = 0.315902 - 0.719037I$		
$a = 2.50104 + 1.03660I$	$-2.69442 + 4.06632I$	$-0.58437 - 4.03909I$
$b = 0.448777 + 0.181262I$		
$u = -0.118535 + 1.224680I$		
$a = -0.225435 - 0.699797I$	$-4.06422 + 1.56618I$	0
$b = -0.369881 - 0.770813I$		
$u = -0.118535 - 1.224680I$		
$a = -0.225435 + 0.699797I$	$-4.06422 - 1.56618I$	0
$b = -0.369881 + 0.770813I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.25091$		
$a = -0.143472$	2.39487	0
$b = 0.0247908$		
$u = -0.096931 + 1.252370I$		
$a = -0.095419 + 0.489360I$	$-8.12216 - 10.14900I$	0
$b = -0.520535 + 1.177090I$		
$u = -0.096931 - 1.252370I$		
$a = -0.095419 - 0.489360I$	$-8.12216 + 10.14900I$	0
$b = -0.520535 - 1.177090I$		
$u = 0.123571 + 1.259900I$		
$a = -0.0030896 + 0.1332200I$	$-3.19553 + 4.35794I$	0
$b = 0.228933 + 0.812143I$		
$u = 0.123571 - 1.259900I$		
$a = -0.0030896 - 0.1332200I$	$-3.19553 - 4.35794I$	0
$b = 0.228933 - 0.812143I$		
$u = -0.622970 + 0.375877I$		
$a = 0.75207 + 1.49826I$	$-3.17837 + 4.67663I$	$1.92891 - 3.96631I$
$b = -1.07825 - 1.03683I$		
$u = -0.622970 - 0.375877I$		
$a = 0.75207 - 1.49826I$	$-3.17837 - 4.67663I$	$1.92891 + 3.96631I$
$b = -1.07825 + 1.03683I$		
$u = -0.664305 + 1.117590I$		
$a = 1.45034 + 0.74035I$	$-0.12881 - 9.67930I$	0
$b = -0.773178 + 1.091240I$		
$u = -0.664305 - 1.117590I$		
$a = 1.45034 - 0.74035I$	$-0.12881 + 9.67930I$	0
$b = -0.773178 - 1.091240I$		
$u = 0.730610 + 1.090670I$		
$a = -1.114580 + 0.329073I$	$2.40641 + 5.55593I$	0
$b = 0.657187 + 0.894189I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.730610 - 1.090670I$		
$a = -1.114580 - 0.329073I$	$2.40641 - 5.55593I$	0
$b = 0.657187 - 0.894189I$		
$u = -0.510606 + 1.212630I$		
$a = -0.717341 - 0.050925I$	$-5.25124 + 1.21183I$	0
$b = -0.020678 - 0.617791I$		
$u = -0.510606 - 1.212630I$		
$a = -0.717341 + 0.050925I$	$-5.25124 - 1.21183I$	0
$b = -0.020678 + 0.617791I$		
$u = 0.709754 + 1.109180I$		
$a = 1.80382 - 0.46751I$	$-2.7010 + 18.0711I$	0
$b = -1.04638 - 1.37372I$		
$u = 0.709754 - 1.109180I$		
$a = 1.80382 + 0.46751I$	$-2.7010 - 18.0711I$	0
$b = -1.04638 + 1.37372I$		
$u = -0.706931 + 1.111350I$		
$a = -1.44364 - 0.52370I$	$2.29515 - 12.34640I$	0
$b = 1.07289 - 0.97536I$		
$u = -0.706931 - 1.111350I$		
$a = -1.44364 + 0.52370I$	$2.29515 + 12.34640I$	0
$b = 1.07289 + 0.97536I$		
$u = -0.142699 + 0.640237I$		
$a = 0.34209 + 1.38789I$	$-2.84596 + 4.76242I$	$-1.34751 - 4.70185I$
$b = -1.39818 - 0.54862I$		
$u = -0.142699 - 0.640237I$		
$a = 0.34209 - 1.38789I$	$-2.84596 - 4.76242I$	$-1.34751 + 4.70185I$
$b = -1.39818 + 0.54862I$		
$u = 0.687518 + 1.182220I$		
$a = 0.704245 - 0.351157I$	$-0.78309 + 5.33239I$	0
$b = -0.713048 - 0.294875I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.687518 - 1.182220I$		
$a = 0.704245 + 0.351157I$	$-0.78309 - 5.33239I$	0
$b = -0.713048 + 0.294875I$		
$u = 0.561025 + 0.178055I$		
$a = 1.210090 + 0.465571I$	$-2.36220 - 3.74881I$	$2.92062 + 2.78211I$
$b = 0.439651 + 0.596445I$		
$u = 0.561025 - 0.178055I$		
$a = 1.210090 - 0.465571I$	$-2.36220 + 3.74881I$	$2.92062 - 2.78211I$
$b = 0.439651 - 0.596445I$		
$u = -0.477393 + 0.343592I$		
$a = 0.08519 - 1.52606I$	$-3.54087 - 1.01143I$	$2.17194 + 3.15617I$
$b = -0.467321 + 0.682390I$		
$u = -0.477393 - 0.343592I$		
$a = 0.08519 + 1.52606I$	$-3.54087 + 1.01143I$	$2.17194 - 3.15617I$
$b = -0.467321 - 0.682390I$		
$u = 0.462129$		
$a = -1.40065$	1.18814	6.83070
$b = 0.814892$		
$u = 0.046008 + 0.429835I$		
$a = -2.46965 - 1.26206I$	$0.60508 + 1.67951I$	$2.80427 - 5.83693I$
$b = -0.053075 + 0.407288I$		
$u = 0.046008 - 0.429835I$		
$a = -2.46965 + 1.26206I$	$0.60508 - 1.67951I$	$2.80427 + 5.83693I$
$b = -0.053075 - 0.407288I$		

$$\text{II. } I_2^u = \langle u^{16} - u^{15} + \cdots - 4u^3 + b, -23u^{16} + 8u^{15} + \cdots + 11a + 8, u^{17} - u^{16} + \cdots - 3u^2 - 1 \rangle$$

(i) **Arc colorings**

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

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} 2.09091u^{16} - 0.727273u^{15} + \cdots - 2.18182u - 0.727273 \\ -u^{16} + u^{15} + \cdots + 7u^5 + 4u^3 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1.09091u^{16} + 0.272727u^{15} + \cdots - 2.18182u - 0.727273 \\ -u^{16} + u^{15} + \cdots + 7u^5 + 4u^3 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -1.18182u^{16} + 2.45455u^{15} + \cdots + 1.36364u - 1.54545 \\ 0.0909091u^{16} - 0.727273u^{15} + \cdots + 0.818182u - 1.72727 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.272727u^{16} + 0.181818u^{15} + \cdots - 1.45455u - 0.818182 \\ 0.363636u^{16} + 0.0909091u^{15} + \cdots - 0.727273u + 0.0909091 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1.54545u^{16} - 0.363636u^{15} + \cdots - 2.09091u - 1.36364 \\ -0.818182u^{16} + 1.54545u^{15} + \cdots - 0.363636u - 0.454545 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^{16} + u^{15} + \cdots - 4u^2 + u \\ 1.36364u^{16} - 1.90909u^{15} + \cdots - 0.727273u - 0.909091 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^{16} + u^{15} + \cdots - 4u^2 + u \\ 1.36364u^{16} - 1.90909u^{15} + \cdots - 0.727273u - 0.909091 \end{pmatrix}$$

(ii) **Obstruction class = 1**

(iii) **Cusp Shapes** = $\frac{78}{11}u^{16} - \frac{63}{11}u^{15} + \cdots + \frac{20}{11}u - \frac{8}{11}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} + u^{16} + \cdots + 3u^2 + 1$
c_2	$u^{17} + 7u^{16} + \cdots - 6u - 1$
c_3	$u^{17} + u^{16} + \cdots - 2u^2 - 1$
c_4	$u^{17} + u^{16} + \cdots + 4u + 1$
c_5	$u^{17} - u^{16} + \cdots - 3u^2 - 1$
c_6	$u^{17} - 2u^{16} + \cdots + 6u + 1$
c_7	$u^{17} - u^{16} + \cdots + 4u - 1$
c_8	$u^{17} + 2u^{15} + \cdots - u - 1$
c_9	$u^{17} - u^{15} + \cdots + 2u - 1$
c_{10}	$u^{17} - 9u^{16} + \cdots + 3u - 1$
c_{11}	$u^{17} + 8u^{16} + \cdots + 4u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{17} + 7y^{16} + \cdots - 6y - 1$
c_2	$y^{17} + 3y^{16} + \cdots - 14y - 1$
c_3	$y^{17} + y^{16} + \cdots - 4y - 1$
c_4, c_7	$y^{17} + 11y^{16} + \cdots - 22y - 1$
c_6	$y^{17} + 4y^{16} + \cdots + 8y - 1$
c_8	$y^{17} + 4y^{16} + \cdots - y - 1$
c_9	$y^{17} - 2y^{16} + \cdots + 18y - 1$
c_{10}	$y^{17} + 7y^{16} + \cdots + 5y - 1$
c_{11}	$y^{17} + 8y^{16} + \cdots + 8y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.122734 + 0.924960I$		
$a = -1.00206 - 1.15728I$	$-6.20661 + 0.55436I$	$-3.35974 - 0.56714I$
$b = 0.062667 - 1.123890I$		
$u = 0.122734 - 0.924960I$		
$a = -1.00206 + 1.15728I$	$-6.20661 - 0.55436I$	$-3.35974 + 0.56714I$
$b = 0.062667 + 1.123890I$		
$u = 0.684492 + 0.841900I$		
$a = -0.793078 - 0.438836I$	$2.91021 + 2.64160I$	$11.92622 - 2.88965I$
$b = -0.249155 + 1.355890I$		
$u = 0.684492 - 0.841900I$		
$a = -0.793078 + 0.438836I$	$2.91021 - 2.64160I$	$11.92622 + 2.88965I$
$b = -0.249155 - 1.355890I$		
$u = -0.587589 + 0.691285I$		
$a = -2.12504 - 1.35796I$	$-1.19877 + 3.86614I$	$3.92641 - 4.92506I$
$b = 1.33891 + 0.47968I$		
$u = -0.587589 - 0.691285I$		
$a = -2.12504 + 1.35796I$	$-1.19877 - 3.86614I$	$3.92641 + 4.92506I$
$b = 1.33891 - 0.47968I$		
$u = -0.605689 + 0.998898I$		
$a = 2.08919 + 1.16507I$	$-2.19753 - 8.63849I$	$2.18255 + 9.85874I$
$b = -1.25998 + 0.86023I$		
$u = -0.605689 - 0.998898I$		
$a = 2.08919 - 1.16507I$	$-2.19753 + 8.63849I$	$2.18255 - 9.85874I$
$b = -1.25998 - 0.86023I$		
$u = 1.21767$		
$a = 0.238878$	2.45771	67.1060
$b = -0.260121$		
$u = -0.250815 + 1.195170I$		
$a = -0.273838 - 0.517799I$	$-4.48302 + 1.95126I$	$-1.08122 - 8.77138I$
$b = -0.401742 - 0.682852I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.250815 - 1.195170I$		
$a = -0.273838 + 0.517799I$	$-4.48302 - 1.95126I$	$-1.08122 + 8.77138I$
$b = -0.401742 + 0.682852I$		
$u = -0.524315 + 0.513369I$		
$a = 0.591551 - 0.469285I$	$-1.62681 - 5.44009I$	$4.90727 + 6.73636I$
$b = 0.802273 - 0.099303I$		
$u = -0.524315 - 0.513369I$		
$a = 0.591551 + 0.469285I$	$-1.62681 + 5.44009I$	$4.90727 - 6.73636I$
$b = 0.802273 + 0.099303I$		
$u = 0.420659 + 0.598526I$		
$a = 2.25093 - 0.56285I$	$1.070290 - 0.654757I$	$6.91810 + 1.92183I$
$b = -0.963143 - 0.483883I$		
$u = 0.420659 - 0.598526I$		
$a = 2.25093 + 0.56285I$	$1.070290 + 0.654757I$	$6.91810 - 1.92183I$
$b = -0.963143 + 0.483883I$		
$u = 0.631690 + 1.122780I$		
$a = -0.857095 + 0.479455I$	$-1.01115 + 5.13361I$	$-3.97273 - 2.25660I$
$b = 0.800233 + 0.266777I$		
$u = 0.631690 - 1.122780I$		
$a = -0.857095 - 0.479455I$	$-1.01115 - 5.13361I$	$-3.97273 + 2.25660I$
$b = 0.800233 - 0.266777I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17} + u^{16} + \dots + 3u^2 + 1)(u^{98} - 2u^{97} + \dots - 37u + 13)$
c_2	$(u^{17} + 7u^{16} + \dots - 6u - 1)(u^{98} + 38u^{97} + \dots + 3909u + 169)$
c_3	$(u^{17} + u^{16} + \dots - 2u^2 - 1)(u^{98} + 8u^{97} + \dots - 2079u - 121)$
c_4	$(u^{17} + u^{16} + \dots + 4u + 1)(u^{98} + 4u^{97} + \dots + 23u + 1)$
c_5	$(u^{17} - u^{16} + \dots - 3u^2 - 1)(u^{98} - 2u^{97} + \dots - 37u + 13)$
c_6	$(u^{17} - 2u^{16} + \dots + 6u + 1)(u^{98} + u^{97} + \dots - 35u - 1)$
c_7	$(u^{17} - u^{16} + \dots + 4u - 1)(u^{98} + 4u^{97} + \dots + 23u + 1)$
c_8	$(u^{17} + 2u^{15} + \dots - u - 1)(u^{98} + u^{97} + \dots - 3372u + 329)$
c_9	$(u^{17} - u^{15} + \dots + 2u - 1)(u^{98} + u^{97} + \dots - 1099u + 29)$
c_{10}	$(u^{17} - 9u^{16} + \dots + 3u - 1)(u^{98} - 6u^{97} + \dots - 80u - 3)$
c_{11}	$(u^{17} + 8u^{16} + \dots + 4u + 1)(u^{98} + 7u^{97} + \dots - 291u + 55)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{17} + 7y^{16} + \dots - 6y - 1)(y^{98} + 38y^{97} + \dots + 3909y + 169)$
c_2	$(y^{17} + 3y^{16} + \dots - 14y - 1)(y^{98} + 42y^{97} + \dots - 1253619y + 28561)$
c_3	$(y^{17} + y^{16} + \dots - 4y - 1)(y^{98} + 20y^{97} + \dots - 1311277y + 14641)$
c_4, c_7	$(y^{17} + 11y^{16} + \dots - 22y - 1)(y^{98} + 70y^{97} + \dots + 101y + 1)$
c_6	$(y^{17} + 4y^{16} + \dots + 8y - 1)(y^{98} + 3y^{97} + \dots - 177y + 1)$
c_8	$(y^{17} + 4y^{16} + \dots - y - 1)(y^{98} + 19y^{97} + \dots + 5038820y + 108241)$
c_9	$(y^{17} - 2y^{16} + \dots + 18y - 1)(y^{98} + 9y^{97} + \dots - 1350887y + 841)$
c_{10}	$(y^{17} + 7y^{16} + \dots + 5y - 1)(y^{98} + 10y^{97} + \dots - 178y + 9)$
c_{11}	$(y^{17} + 8y^{16} + \dots + 8y - 1)(y^{98} + 3y^{97} + \dots - 70161y + 3025)$