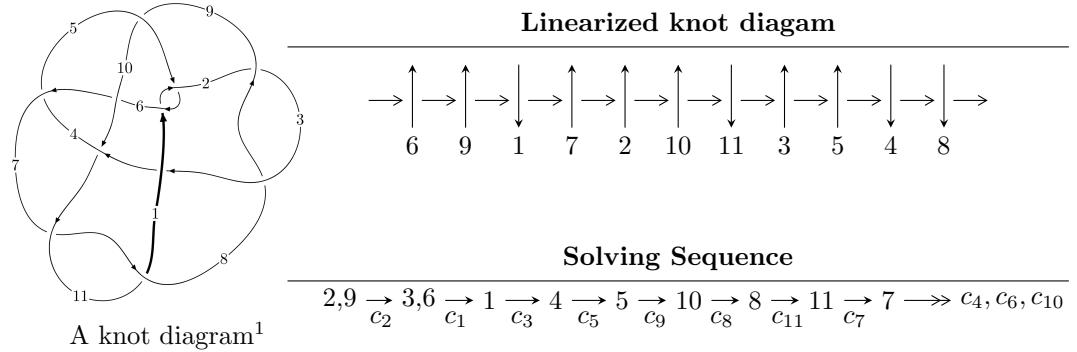


11a₂₉₀ ($K11a_{290}$)



Ideals for irreducible components² of X_{par}

$$\begin{aligned}
 I_1^u &= \langle -5.37582 \times 10^{277} u^{85} + 1.96137 \times 10^{278} u^{84} + \dots + 1.50205 \times 10^{280} b + 1.64826 \times 10^{280}, \\
 &\quad - 9.79158 \times 10^{279} u^{85} + 4.00194 \times 10^{280} u^{84} + \dots + 2.71871 \times 10^{282} a + 2.80758 \times 10^{282}, \\
 &\quad u^{86} - 3u^{85} + \dots + 1252u + 181 \rangle \\
 I_2^u &= \langle 2984u^{15} + 8425u^{14} + \dots + 8374b - 4575, -28033u^{15} - 151872u^{14} + \dots + 159106a + 94137, \\
 &\quad u^{16} + 4u^{15} + \dots - 3u + 1 \rangle
 \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 102 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.

$$\text{I. } I_1^u = \langle -5.38 \times 10^{277} u^{85} + 1.96 \times 10^{278} u^{84} + \dots + 1.50 \times 10^{280} b + 1.65 \times 10^{280}, -9.79 \times 10^{279} u^{85} + 4.00 \times 10^{280} u^{84} + \dots + 2.72 \times 10^{282} a + 2.81 \times 10^{282}, u^{86} - 3u^{85} + \dots + 1252u + 181 \rangle$$

(i) **Arc colorings**

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.00360156u^{85} - 0.0147200u^{84} + \dots - 21.7698u - 1.03269 \\ 0.00357899u^{85} - 0.0130580u^{84} + \dots - 9.94894u - 1.09735 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0110795u^{85} - 0.00313808u^{84} + \dots - 9.57734u + 0.460705 \\ 0.0148192u^{85} - 0.0206209u^{84} + \dots + 24.7475u + 3.74548 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.00535817u^{85} + 0.0164595u^{84} + \dots + 31.0765u + 3.73032 \\ 0.00748731u^{85} - 0.0280075u^{84} + \dots - 23.3642u - 3.54432 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.0000225642u^{85} - 0.00166203u^{84} + \dots - 11.8208u + 0.0646558 \\ 0.00357899u^{85} - 0.0130580u^{84} + \dots - 9.94894u - 1.09735 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.00480532u^{85} - 0.00440844u^{84} + \dots + 41.7070u + 5.30239 \\ 0.00626377u^{85} - 0.0151027u^{84} + \dots + 1.39732u + 0.676884 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.00788554u^{85} - 0.0135049u^{84} + \dots - 24.0195u - 1.63228 \\ 0.00703857u^{85} - 0.00686933u^{84} + \dots + 13.6359u + 2.22777 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.00149491u^{85} - 0.0103635u^{84} + \dots - 63.8971u - 7.88042 \\ -0.0199005u^{85} + 0.0905386u^{84} + \dots + 16.1319u + 2.96059 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.00149491u^{85} - 0.0103635u^{84} + \dots - 63.8971u - 7.88042 \\ -0.0199005u^{85} + 0.0905386u^{84} + \dots + 16.1319u + 2.96059 \end{pmatrix}$$

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

(iii) **Cusp Shapes** = $0.0176283u^{85} + 0.178110u^{84} + \dots + 296.326u + 45.8239$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{86} + 28u^{84} + \cdots + 558u + 43$
c_2, c_8	$u^{86} - 3u^{85} + \cdots + 1252u + 181$
c_3	$u^{86} - 10u^{85} + \cdots - 377377u + 57122$
c_4	$u^{86} + 9u^{85} + \cdots + 6249u + 722$
c_6	$u^{86} - 2u^{85} + \cdots + 31u + 1$
c_7, c_{11}	$u^{86} - 2u^{85} + \cdots + 15u + 1$
c_9	$u^{86} + 18u^{84} + \cdots + 257661u + 27211$
c_{10}	$u^{86} - 2u^{85} + \cdots - 11u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{86} + 56y^{85} + \cdots + 192768y + 1849$
c_2, c_8	$y^{86} + 67y^{85} + \cdots + 1561986y + 32761$
c_3	$y^{86} - 40y^{85} + \cdots - 106949549161y + 3262922884$
c_4	$y^{86} + 21y^{85} + \cdots + 18203155y + 521284$
c_6	$y^{86} + 2y^{85} + \cdots - 173y + 1$
c_7, c_{11}	$y^{86} - 70y^{85} + \cdots + 163y + 1$
c_9	$y^{86} + 36y^{85} + \cdots - 1107389665y + 740438521$
c_{10}	$y^{86} - 18y^{85} + \cdots - 43y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.273563 + 0.969299I$		
$a = -0.558541 - 0.791320I$	$-1.75556 + 2.96398I$	0
$b = -0.750237 - 0.353855I$		
$u = 0.273563 - 0.969299I$		
$a = -0.558541 + 0.791320I$	$-1.75556 - 2.96398I$	0
$b = -0.750237 + 0.353855I$		
$u = -0.791405 + 0.487265I$		
$a = -1.249760 + 0.001637I$	$-2.76919 + 0.86190I$	0
$b = 0.176471 - 0.796902I$		
$u = -0.791405 - 0.487265I$		
$a = -1.249760 - 0.001637I$	$-2.76919 - 0.86190I$	0
$b = 0.176471 + 0.796902I$		
$u = 1.058500 + 0.166799I$		
$a = 0.195269 - 0.257088I$	$-0.44655 + 6.40335I$	0
$b = -0.384724 - 1.167240I$		
$u = 1.058500 - 0.166799I$		
$a = 0.195269 + 0.257088I$	$-0.44655 - 6.40335I$	0
$b = -0.384724 + 1.167240I$		
$u = 0.433257 + 0.809408I$		
$a = -0.481754 - 0.210140I$	$0.18140 + 1.93771I$	0
$b = -0.184332 + 0.437485I$		
$u = 0.433257 - 0.809408I$		
$a = -0.481754 + 0.210140I$	$0.18140 - 1.93771I$	0
$b = -0.184332 - 0.437485I$		
$u = 0.822552 + 0.231435I$		
$a = 0.584539 + 0.759190I$	$-1.52512 + 6.90858I$	0
$b = -0.725573 + 0.219124I$		
$u = 0.822552 - 0.231435I$		
$a = 0.584539 - 0.759190I$	$-1.52512 - 6.90858I$	0
$b = -0.725573 - 0.219124I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.054741 + 1.153840I$		
$a = -0.24301 + 2.56854I$	$-1.32630 - 3.41399I$	0
$b = -0.119574 + 1.052110I$		
$u = -0.054741 - 1.153840I$		
$a = -0.24301 - 2.56854I$	$-1.32630 + 3.41399I$	0
$b = -0.119574 - 1.052110I$		
$u = 0.079218 + 1.178320I$		
$a = -0.012899 - 0.520620I$	$-2.46468 + 1.92737I$	0
$b = -0.729471 - 0.142215I$		
$u = 0.079218 - 1.178320I$		
$a = -0.012899 + 0.520620I$	$-2.46468 - 1.92737I$	0
$b = -0.729471 + 0.142215I$		
$u = -0.526037 + 1.072220I$		
$a = -0.072054 + 0.352626I$	$-4.76421 - 5.78091I$	0
$b = -0.200801 - 0.661210I$		
$u = -0.526037 - 1.072220I$		
$a = -0.072054 - 0.352626I$	$-4.76421 + 5.78091I$	0
$b = -0.200801 + 0.661210I$		
$u = -0.796875 + 0.085423I$		
$a = -0.340912 - 0.000196I$	$-2.78970 + 1.91473I$	$0. - 3.13596I$
$b = 0.088188 + 1.153450I$		
$u = -0.796875 - 0.085423I$		
$a = -0.340912 + 0.000196I$	$-2.78970 - 1.91473I$	$0. + 3.13596I$
$b = 0.088188 - 1.153450I$		
$u = 0.674546 + 0.412385I$		
$a = -1.71045 - 0.61869I$	$-3.09982 - 3.89257I$	$0. + 7.60203I$
$b = 0.414687 - 0.836442I$		
$u = 0.674546 - 0.412385I$		
$a = -1.71045 + 0.61869I$	$-3.09982 + 3.89257I$	$0. - 7.60203I$
$b = 0.414687 + 0.836442I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.029748 + 1.211970I$		
$a = -0.776818 - 0.475869I$	$-1.72544 + 2.47755I$	0
$b = -1.251790 - 0.400798I$		
$u = 0.029748 - 1.211970I$		
$a = -0.776818 + 0.475869I$	$-1.72544 - 2.47755I$	0
$b = -1.251790 + 0.400798I$		
$u = -0.714002 + 0.312630I$		
$a = -0.466193 - 0.747453I$	$-2.08518 - 4.50257I$	$1.84178 + 8.26392I$
$b = 0.472121 - 1.150990I$		
$u = -0.714002 - 0.312630I$		
$a = -0.466193 + 0.747453I$	$-2.08518 + 4.50257I$	$1.84178 - 8.26392I$
$b = 0.472121 + 1.150990I$		
$u = -0.159848 + 1.234050I$		
$a = 0.529862 - 0.023389I$	$-1.05879 - 4.77375I$	0
$b = 1.371900 + 0.103900I$		
$u = -0.159848 - 1.234050I$		
$a = 0.529862 + 0.023389I$	$-1.05879 + 4.77375I$	0
$b = 1.371900 - 0.103900I$		
$u = 0.538060 + 0.526043I$		
$a = -0.678151 + 0.085231I$	$0.75640 + 1.97088I$	$6.98873 - 3.30851I$
$b = 0.416327 + 0.832614I$		
$u = 0.538060 - 0.526043I$		
$a = -0.678151 - 0.085231I$	$0.75640 - 1.97088I$	$6.98873 + 3.30851I$
$b = 0.416327 - 0.832614I$		
$u = 0.246587 + 1.249730I$		
$a = 0.32583 - 2.92544I$	$-5.93474 + 7.14233I$	0
$b = -0.113725 - 1.064060I$		
$u = 0.246587 - 1.249730I$		
$a = 0.32583 + 2.92544I$	$-5.93474 - 7.14233I$	0
$b = -0.113725 + 1.064060I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.714469 + 0.107760I$	$-2.61985 + 1.17605I$	$1.036569 - 0.187938I$
$a = -0.789250 + 0.825546I$		
$b = -0.0426813 - 0.1283240I$		
$u = -0.714469 - 0.107760I$	$-2.61985 - 1.17605I$	$1.036569 + 0.187938I$
$a = -0.789250 - 0.825546I$		
$b = -0.0426813 + 0.1283240I$		
$u = 0.078198 + 1.275430I$	$-10.13010 + 5.46901I$	0
$a = 1.13726 - 2.18042I$		
$b = -0.354521 - 1.348510I$		
$u = 0.078198 - 1.275430I$	$-10.13010 - 5.46901I$	0
$a = 1.13726 + 2.18042I$		
$b = -0.354521 + 1.348510I$		
$u = -0.176487 + 1.270570I$	$-6.11732 - 3.95002I$	0
$a = 0.036238 - 0.305363I$		
$b = 1.043670 - 0.552437I$		
$u = -0.176487 - 1.270570I$	$-6.11732 + 3.95002I$	0
$a = 0.036238 + 0.305363I$		
$b = 1.043670 + 0.552437I$		
$u = -0.179144 + 1.277070I$	$-8.41301 - 3.69610I$	0
$a = -0.26902 - 1.57349I$		
$b = 0.83796 - 1.48737I$		
$u = -0.179144 - 1.277070I$	$-8.41301 + 3.69610I$	0
$a = -0.26902 + 1.57349I$		
$b = 0.83796 + 1.48737I$		
$u = -0.261605 + 1.326890I$	$-7.29801 - 1.70122I$	0
$a = -0.44168 - 1.72698I$		
$b = 0.31957 - 1.56887I$		
$u = -0.261605 - 1.326890I$	$-7.29801 + 1.70122I$	0
$a = -0.44168 + 1.72698I$		
$b = 0.31957 + 1.56887I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.378360 + 1.326520I$	$-6.77744 - 6.30203I$	0
$a = 0.87070 + 1.64004I$		
$b = -0.428512 + 1.305690I$		
$u = -0.378360 - 1.326520I$	$-6.77744 + 6.30203I$	0
$a = 0.87070 - 1.64004I$		
$b = -0.428512 - 1.305690I$		
$u = -1.280750 + 0.519114I$	$-4.46055 - 11.18420I$	0
$a = 0.389301 + 0.640771I$		
$b = -0.414651 + 1.174810I$		
$u = -1.280750 - 0.519114I$	$-4.46055 + 11.18420I$	0
$a = 0.389301 - 0.640771I$		
$b = -0.414651 - 1.174810I$		
$u = -0.019101 + 1.401050I$	$-12.14740 - 4.74643I$	0
$a = -0.23552 + 1.78688I$		
$b = 0.43425 + 1.53897I$		
$u = -0.019101 - 1.401050I$	$-12.14740 + 4.74643I$	0
$a = -0.23552 - 1.78688I$		
$b = 0.43425 - 1.53897I$		
$u = -0.148079 + 1.400730I$	$-9.95220 - 0.65712I$	0
$a = 1.12074 + 1.42376I$		
$b = -0.110874 + 1.089880I$		
$u = -0.148079 - 1.400730I$	$-9.95220 + 0.65712I$	0
$a = 1.12074 - 1.42376I$		
$b = -0.110874 - 1.089880I$		
$u = 0.18402 + 1.40665I$	$-5.12935 + 4.31635I$	0
$a = 0.18310 - 1.74200I$		
$b = -0.62071 - 1.36597I$		
$u = 0.18402 - 1.40665I$	$-5.12935 - 4.31635I$	0
$a = 0.18310 + 1.74200I$		
$b = -0.62071 + 1.36597I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.35726 + 1.39065I$		
$a = 0.0345880 + 0.0824053I$	$-7.36616 - 3.03836I$	0
$b = -0.833294 - 0.003827I$		
$u = -0.35726 - 1.39065I$		
$a = 0.0345880 - 0.0824053I$	$-7.36616 + 3.03836I$	0
$b = -0.833294 + 0.003827I$		
$u = 0.32019 + 1.40690I$		
$a = 0.394902 + 0.096675I$	$-6.75829 + 10.98080I$	0
$b = 1.225800 - 0.072859I$		
$u = 0.32019 - 1.40690I$		
$a = 0.394902 - 0.096675I$	$-6.75829 - 10.98080I$	0
$b = 1.225800 + 0.072859I$		
$u = -0.27512 + 1.42570I$		
$a = 0.39471 + 2.11603I$	$-7.64272 - 8.09055I$	0
$b = -0.47939 + 1.46461I$		
$u = -0.27512 - 1.42570I$		
$a = 0.39471 - 2.11603I$	$-7.64272 + 8.09055I$	0
$b = -0.47939 - 1.46461I$		
$u = 0.26743 + 1.43796I$		
$a = -0.124019 + 0.837964I$	$-5.18226 - 1.85610I$	0
$b = -0.585323 + 0.305477I$		
$u = 0.26743 - 1.43796I$		
$a = -0.124019 - 0.837964I$	$-5.18226 + 1.85610I$	0
$b = -0.585323 - 0.305477I$		
$u = 0.531703 + 0.023026I$		
$a = -0.668608 + 0.076796I$	$1.105700 + 0.002392I$	$9.73011 + 0.07496I$
$b = 0.677470 + 0.043888I$		
$u = 0.531703 - 0.023026I$		
$a = -0.668608 - 0.076796I$	$1.105700 - 0.002392I$	$9.73011 - 0.07496I$
$b = 0.677470 - 0.043888I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.42393 + 1.40684I$		
$a = -0.49693 + 1.62111I$	$-5.44322 + 11.59020I$	0
$b = 0.60345 + 1.42770I$		
$u = 0.42393 - 1.40684I$		
$a = -0.49693 - 1.62111I$	$-5.44322 - 11.59020I$	0
$b = 0.60345 - 1.42770I$		
$u = -0.491963 + 0.128609I$		
$a = 0.55174 + 1.79794I$	$2.29978 + 2.36466I$	$8.84869 - 2.14342I$
$b = -0.674909 + 0.297545I$		
$u = -0.491963 - 0.128609I$		
$a = 0.55174 - 1.79794I$	$2.29978 - 2.36466I$	$8.84869 + 2.14342I$
$b = -0.674909 - 0.297545I$		
$u = -0.62650 + 1.36361I$		
$a = -0.39539 - 1.41576I$	$-3.91481 - 0.17244I$	0
$b = -0.109699 - 1.037280I$		
$u = -0.62650 - 1.36361I$		
$a = -0.39539 + 1.41576I$	$-3.91481 + 0.17244I$	0
$b = -0.109699 + 1.037280I$		
$u = 0.00350 + 1.52364I$		
$a = 0.358278 + 1.317200I$	$-10.65740 - 1.60329I$	0
$b = -0.550954 + 1.178570I$		
$u = 0.00350 - 1.52364I$		
$a = 0.358278 - 1.317200I$	$-10.65740 + 1.60329I$	0
$b = -0.550954 - 1.178570I$		
$u = -0.439430 + 0.147669I$		
$a = -1.44145 + 1.37928I$	$-4.80669 + 1.43419I$	$-5.07531 - 5.47709I$
$b = -0.363451 - 1.148080I$		
$u = -0.439430 - 0.147669I$		
$a = -1.44145 - 1.37928I$	$-4.80669 - 1.43419I$	$-5.07531 + 5.47709I$
$b = -0.363451 + 1.148080I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.086601 + 0.438946I$		
$a = -1.329560 + 0.007199I$	$0.92382 + 2.38456I$	$6.67469 + 4.68387I$
$b = 0.590173 + 0.816881I$		
$u = -0.086601 - 0.438946I$		
$a = -1.329560 - 0.007199I$	$0.92382 - 2.38456I$	$6.67469 - 4.68387I$
$b = 0.590173 - 0.816881I$		
$u = -0.47210 + 1.56780I$		
$a = -0.51576 - 1.61493I$	$-10.9523 - 17.3442I$	0
$b = 0.59006 - 1.38905I$		
$u = -0.47210 - 1.56780I$		
$a = -0.51576 + 1.61493I$	$-10.9523 + 17.3442I$	0
$b = 0.59006 + 1.38905I$		
$u = 0.45071 + 1.62342I$		
$a = -0.35003 + 1.51866I$	$-12.3927 + 8.1607I$	0
$b = 0.30166 + 1.40852I$		
$u = 0.45071 - 1.62342I$		
$a = -0.35003 - 1.51866I$	$-12.3927 - 8.1607I$	0
$b = 0.30166 - 1.40852I$		
$u = 0.59453 + 1.60446I$		
$a = 0.62690 - 1.41851I$	$-11.17030 + 7.76159I$	0
$b = -0.464293 - 1.266200I$		
$u = 0.59453 - 1.60446I$		
$a = 0.62690 + 1.41851I$	$-11.17030 - 7.76159I$	0
$b = -0.464293 + 1.266200I$		
$u = -0.102691 + 0.229037I$		
$a = 0.30517 - 2.13509I$	$1.09250 - 2.96405I$	$12.5613 + 9.8421I$
$b = 0.898880 - 0.683918I$		
$u = -0.102691 - 0.229037I$		
$a = 0.30517 + 2.13509I$	$1.09250 + 2.96405I$	$12.5613 - 9.8421I$
$b = 0.898880 + 0.683918I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.077135 + 0.222987I$	$-6.67412 - 4.74942I$	$-4.72582 + 5.55088I$
$a = 3.84908 + 2.69551I$		
$b = 0.003349 - 1.290410I$		
$u = 0.077135 - 0.222987I$		
$a = 3.84908 - 2.69551I$	$-6.67412 + 4.74942I$	$-4.72582 - 5.55088I$
$b = 0.003349 + 1.290410I$		
$u = 0.66832 + 1.87320I$		
$a = 0.324156 - 1.096740I$	$-4.31969 + 0.37021I$	0
$b = -0.045174 - 1.060190I$		
$u = 0.66832 - 1.87320I$		
$a = 0.324156 + 1.096740I$	$-4.31969 - 0.37021I$	0
$b = -0.045174 + 1.060190I$		
$u = 2.79686 + 0.72592I$		
$a = -0.106036 + 0.931168I$	$-4.97029 - 0.39838I$	0
$b = 0.072665 + 1.004210I$		
$u = 2.79686 - 0.72592I$		
$a = -0.106036 - 0.931168I$	$-4.97029 + 0.39838I$	0
$b = 0.072665 - 1.004210I$		

$$\text{II. } I_2^u = \langle 2984u^{15} + 8425u^{14} + \dots + 8374b - 4575, -2.80 \times 10^4 u^{15} - 1.52 \times 10^5 u^{14} + \dots + 1.59 \times 10^5 a + 9.41 \times 10^4, u^{16} + 4u^{15} + \dots - 3u + 1 \rangle$$

(i) **Arc colorings**

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.176191u^{15} + 0.954533u^{14} + \dots - 2.25062u - 0.591662 \\ -0.356341u^{15} - 1.00609u^{14} + \dots - 5.13566u + 0.546334 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.106652u^{15} + 0.802999u^{14} + \dots + 2.04999u - 0.149856 \\ -0.339981u^{15} - 1.42823u^{14} + \dots + 5.00060u - 1.61464 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.137644u^{15} + 0.420336u^{14} + \dots + 1.85401u - 0.285571 \\ -0.808021u^{15} - 3.10940u^{14} + \dots - 5.07303u + 0.205354 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.532532u^{15} + 1.96062u^{14} + \dots + 2.88504u - 1.13800 \\ -0.356341u^{15} - 1.00609u^{14} + \dots - 5.13566u + 0.546334 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.352928u^{15} - 1.82485u^{14} + \dots + 1.72757u - 2.98321 \\ 0.444697u^{15} + 1.82824u^{14} + \dots + 2.80468u - 0.446633 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.763711u^{15} + 3.26176u^{14} + \dots + 2.51728u - 0.476437 \\ -0.565849u^{15} - 2.48415u^{14} + \dots + 5.69879u - 1.45754 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.894335u^{15} - 4.06800u^{14} + \dots - 5.46111u + 1.11283 \\ -0.471126u^{15} - 1.42425u^{14} + \dots - 4.53190u + 0.730689 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.894335u^{15} - 4.06800u^{14} + \dots - 5.46111u + 1.11283 \\ -0.471126u^{15} - 1.42425u^{14} + \dots - 4.53190u + 0.730689 \end{pmatrix}$$

(ii) **Obstruction class = 1**

(iii) **Cusp Shapes** = $-\frac{369566}{79553}u^{15} - \frac{2837157}{159106}u^{14} + \dots - \frac{3511991}{79553}u + \frac{872049}{159106}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{16} + 7y^{15} + \cdots + 9y + 1$
c_2, c_8	$y^{16} + 6y^{15} + \cdots + 11y + 1$
c_3	$y^{16} - 13y^{15} + \cdots - 34y + 1$
c_4	$y^{16} + 14y^{14} + \cdots + 9y + 1$
c_6	$y^{16} + y^{15} + \cdots - 8y + 1$
c_7, c_{11}	$y^{16} - 15y^{15} + \cdots - 52y + 9$
c_9	$y^{16} - y^{15} + \cdots + 8y + 1$
c_{10}	$y^{16} - 11y^{15} + \cdots + 6y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.378111 + 0.978487I$		
$a = -0.666529 - 0.994815I$	$-4.37357 - 6.52510I$	$1.74145 + 8.04405I$
$b = -0.073329 + 0.541610I$		
$u = -0.378111 - 0.978487I$		
$a = -0.666529 + 0.994815I$	$-4.37357 + 6.52510I$	$1.74145 - 8.04405I$
$b = -0.073329 - 0.541610I$		
$u = -0.018830 + 1.228110I$		
$a = 0.672213 - 0.674390I$	$-1.77120 - 2.90292I$	$2.29428 + 12.81390I$
$b = 1.228670 - 0.432911I$		
$u = -0.018830 - 1.228110I$		
$a = 0.672213 + 0.674390I$	$-1.77120 + 2.90292I$	$2.29428 - 12.81390I$
$b = 1.228670 + 0.432911I$		
$u = 0.132204 + 0.702423I$		
$a = -0.397911 + 0.658860I$	$0.59940 + 2.95194I$	$3.83398 - 7.26920I$
$b = -0.487953 - 0.407538I$		
$u = 0.132204 - 0.702423I$		
$a = -0.397911 - 0.658860I$	$0.59940 - 2.95194I$	$3.83398 + 7.26920I$
$b = -0.487953 + 0.407538I$		
$u = -0.179458 + 1.283900I$		
$a = -0.45896 - 1.46838I$	$-8.08336 - 3.63657I$	$2.99708 + 2.92692I$
$b = 0.73097 - 1.35093I$		
$u = -0.179458 - 1.283900I$		
$a = -0.45896 + 1.46838I$	$-8.08336 + 3.63657I$	$2.99708 - 2.92692I$
$b = 0.73097 + 1.35093I$		
$u = 0.352631 + 1.343290I$		
$a = -0.77131 + 2.08744I$	$-8.53798 + 7.71046I$	$-6.07633 - 6.67688I$
$b = 0.33437 + 1.38072I$		
$u = 0.352631 - 1.343290I$		
$a = -0.77131 - 2.08744I$	$-8.53798 - 7.71046I$	$-6.07633 + 6.67688I$
$b = 0.33437 - 1.38072I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.021984 + 0.564934I$		
$a = 0.165428 - 0.113303I$	$0.61323 + 2.78453I$	$-4.10721 - 5.83574I$
$b = -0.761615 - 0.708206I$		
$u = -0.021984 - 0.564934I$		
$a = 0.165428 + 0.113303I$	$0.61323 - 2.78453I$	$-4.10721 + 5.83574I$
$b = -0.761615 + 0.708206I$		
$u = 0.336771 + 0.246995I$		
$a = -0.41990 - 3.30846I$	$-3.30428 + 2.37215I$	$-2.07418 - 4.57437I$
$b = -0.425355 - 0.816659I$		
$u = 0.336771 - 0.246995I$		
$a = -0.41990 + 3.30846I$	$-3.30428 - 2.37215I$	$-2.07418 + 4.57437I$
$b = -0.425355 + 0.816659I$		
$u = -2.22322 + 1.25773I$		
$a = -0.123030 - 0.853242I$	$-4.75104 - 0.34808I$	$-9.6091 - 17.4795I$
$b = -0.045764 - 1.056210I$		
$u = -2.22322 - 1.25773I$		
$a = -0.123030 + 0.853242I$	$-4.75104 + 0.34808I$	$-9.6091 + 17.4795I$
$b = -0.045764 + 1.056210I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{16} - u^{15} + \dots + 3u + 1)(u^{86} + 28u^{84} + \dots + 558u + 43)$
c_2	$(u^{16} + 4u^{15} + \dots - 3u + 1)(u^{86} - 3u^{85} + \dots + 1252u + 181)$
c_3	$(u^{16} + 3u^{15} + \dots - 6u + 1)(u^{86} - 10u^{85} + \dots - 377377u + 57122)$
c_4	$(u^{16} + 2u^{15} + \dots - u + 1)(u^{86} + 9u^{85} + \dots + 6249u + 722)$
c_5	$(u^{16} + u^{15} + \dots - 3u + 1)(u^{86} + 28u^{84} + \dots + 558u + 43)$
c_6	$(u^{16} - 3u^{15} + \dots - 2u + 1)(u^{86} - 2u^{85} + \dots + 31u + 1)$
c_7	$(u^{16} + 3u^{15} + \dots - 4u + 3)(u^{86} - 2u^{85} + \dots + 15u + 1)$
c_8	$(u^{16} - 4u^{15} + \dots + 3u + 1)(u^{86} - 3u^{85} + \dots + 1252u + 181)$
c_9	$(u^{16} + u^{15} + \dots - 2u + 1)(u^{86} + 18u^{84} + \dots + 257661u + 27211)$
c_{10}	$(u^{16} - 3u^{15} + \dots + 4u + 1)(u^{86} - 2u^{85} + \dots - 11u + 1)$
c_{11}	$(u^{16} - 3u^{15} + \dots + 4u + 3)(u^{86} - 2u^{85} + \dots + 15u + 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{16} + 7y^{15} + \dots + 9y + 1)(y^{86} + 56y^{85} + \dots + 192768y + 1849)$
c_2, c_8	$(y^{16} + 6y^{15} + \dots + 11y + 1)(y^{86} + 67y^{85} + \dots + 1561986y + 32761)$
c_3	$(y^{16} - 13y^{15} + \dots - 34y + 1)$ $\cdot (y^{86} - 40y^{85} + \dots - 106949549161y + 3262922884)$
c_4	$(y^{16} + 14y^{14} + \dots + 9y + 1)$ $\cdot (y^{86} + 21y^{85} + \dots + 18203155y + 521284)$
c_6	$(y^{16} + y^{15} + \dots - 8y + 1)(y^{86} + 2y^{85} + \dots - 173y + 1)$
c_7, c_{11}	$(y^{16} - 15y^{15} + \dots - 52y + 9)(y^{86} - 70y^{85} + \dots + 163y + 1)$
c_9	$(y^{16} - y^{15} + \dots + 8y + 1)$ $\cdot (y^{86} + 36y^{85} + \dots - 1107389665y + 740438521)$
c_{10}	$(y^{16} - 11y^{15} + \dots + 6y + 1)(y^{86} - 18y^{85} + \dots - 43y + 1)$