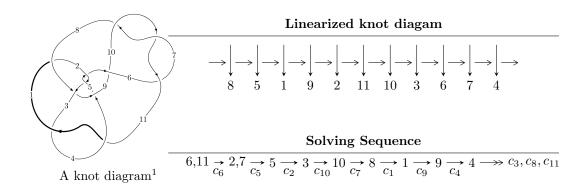
$11a_{292} (K11a_{292})$



Ideals for irreducible components² of X_{par}

$$\begin{split} I_1^u &= \langle 14579744602u^{24} + 15331471056u^{23} + \dots + 396477743843b - 332846474137, \\ &\quad 362005963341u^{24} - 27656036296u^{23} + \dots + 1585910975372a - 1558403855541, \\ &\quad u^{25} + 11u^{23} + \dots + 5u - 4 \rangle \\ I_2^u &= \langle 8u^{20}a - 2u^{20} + \dots - a - 2, \ -2u^{20}a + 3u^{20} + \dots + a^2 + 10, \ u^{21} + u^{20} + \dots - u - 1 \rangle \\ I_3^u &= \langle b + 1, \ 2u^2 + 2a - 2u + 5, \ u^3 - u^2 + 2u - 1 \rangle \end{split}$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 70 representations.

¹The 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.

$$\begin{matrix} \text{I. } I_1^u = \\ \langle 1.46 \times 10^{10} u^{24} + 1.53 \times 10^{10} u^{23} + \dots + 3.96 \times 10^{11} b - 3.33 \times 10^{11}, \ 3.62 \times 10^{11} u^{24} - \\ 2.77 \times 10^{10} u^{23} + \dots + 1.59 \times 10^{12} a - 1.56 \times 10^{12}, \ u^{25} + 11 u^{23} + \dots + 5 u - 4 \rangle \end{matrix}$$

(i) Arc colorings

$$a_{6} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_{2} = \begin{pmatrix} -0.228264u^{24} + 0.0174386u^{23} + \dots - 4.67501u + 0.982655 \\ -0.0367732u^{24} - 0.0386692u^{23} + \dots - 1.61229u + 0.839509 \end{pmatrix}$$

$$a_{7} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

$$a_{5} = \begin{pmatrix} 0.244682u^{24} - 0.0104806u^{23} + \dots + 4.92670u - 0.639254 \\ 0.0214093u^{24} + 0.0107022u^{23} + \dots + 2.37619u - 0.880534 \end{pmatrix}$$

$$a_{3} = \begin{pmatrix} -0.454939u^{24} + 0.0416564u^{23} + \dots - 8.69816u + 2.21103 \\ -0.0416564u^{24} - 0.0575212u^{23} + \dots - 4.48573u + 1.81976 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u^{3} + u \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} u^{2} + 1 \\ u^{4} + 2u^{2} \end{pmatrix}$$

$$a_{9} = \begin{pmatrix} u^{3} + 2u \\ u^{3} + u \end{pmatrix}$$

$$a_{9} = \begin{pmatrix} u^{3} + 2u \\ u^{3} + u \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} 0.209877u^{24} - 0.0367732u^{23} + \dots + 4.36887u - 0.562901 \\ 0.0174386u^{24} + 0.0197581u^{23} + \dots + 2.12397u - 0.913055 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} 0.209877u^{24} - 0.0367732u^{23} + \dots + 4.36887u - 0.562901 \\ 0.0174386u^{24} + 0.0197581u^{23} + \dots + 4.36887u - 0.562901 \\ 0.0174386u^{24} + 0.0197581u^{23} + \dots + 4.36887u - 0.562901 \\ 0.0174386u^{24} + 0.0197581u^{23} + \dots + 4.36887u - 0.562901 \\ 0.0174386u^{24} + 0.0197581u^{23} + \dots + 4.36887u - 0.562901 \\ 0.0174386u^{24} + 0.0197581u^{23} + \dots + 4.36887u - 0.913055 \end{pmatrix}$$

(ii) Obstruction class = -1

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$8(8u^{25} - 4u^{24} + \dots + 2u + 1)$
c_2, c_3, c_5 c_{11}	$u^{25} + 3u^{24} + \dots + 3u + 1$
c_6, c_7, c_{10}	$u^{25} + 11u^{23} + \dots + 5u + 4$
c_8	$u^{25} + 3u^{24} + \dots + 352u + 128$
<i>c</i> ₉	$u^{25} - u^{23} + \dots + 797u + 292$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$64(64y^{25} + 240y^{24} + \dots + 16y - 1)$
c_2, c_3, c_5 c_{11}	$y^{25} + 11y^{24} + \dots + 3y - 1$
c_6, c_7, c_{10}	$y^{25} + 22y^{24} + \dots + 241y - 16$
c_8	$y^{25} + 7y^{24} + \dots - 84992y - 16384$
<i>c</i> ₉	$y^{25} - 2y^{24} + \dots + 1188257y - 85264$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = -0.548894 + 0.797398I		
a = -0.101206 - 0.491260I	5.61589 - 7.41862I	-5.99307 + 4.17618I
b = -0.474580 - 1.242550I		
u = -0.548894 - 0.797398I		
a = -0.101206 + 0.491260I	5.61589 + 7.41862I	-5.99307 - 4.17618I
b = -0.474580 + 1.242550I		
u = 0.706370 + 0.548812I		
a = 0.798029 - 0.174639I	0.86744 - 3.46984I	-11.3753 + 9.7737I
b = 0.263483 + 0.886965I		
u = 0.706370 - 0.548812I		
a = 0.798029 + 0.174639I	0.86744 + 3.46984I	-11.3753 - 9.7737I
b = 0.263483 - 0.886965I		
u = 0.858910 + 0.133092I		
a = -0.566243 - 0.452994I	-0.421269 - 1.124170I	-15.1711 + 4.4746I
b = -0.131692 - 0.750408I		
u = 0.858910 - 0.133092I		
a = -0.566243 + 0.452994I	-0.421269 + 1.124170I	-15.1711 - 4.4746I
b = -0.131692 + 0.750408I		
u = -0.809123 + 0.315012I		
a = -1.88500 + 0.57325I	4.07653 + 12.13020I	-8.33349 - 8.34430I
b = -0.546754 + 1.295430I		
u = -0.809123 - 0.315012I		
a = -1.88500 - 0.57325I	4.07653 - 12.13020I	-8.33349 + 8.34430I
b = -0.546754 - 1.295430I		
u = -0.156187 + 1.202150I		
a = 1.122910 + 0.745988I	0.27538 + 2.19318I	-11.91071 + 0.36993I
b = 0.946754 - 0.548140I		
u = -0.156187 - 1.202150I		
a = 1.122910 - 0.745988I	0.27538 - 2.19318I	-11.91071 - 0.36993I
b = 0.946754 + 0.548140I		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 0.223868 + 1.253510I		
a = -0.470162 + 0.030904I	2.68775 - 2.30692I	-5.11682 + 1.56003I
b = -0.238848 + 0.287288I		
u = 0.223868 - 1.253510I		
a = -0.470162 - 0.030904I	2.68775 + 2.30692I	-5.11682 - 1.56003I
b = -0.238848 - 0.287288I		
u = 0.471042 + 1.205750I		
a = -0.864543 + 0.069126I	3.65181 - 5.92897I	-7.49144 + 10.01248I
b = -0.306312 - 0.956199I		
u = 0.471042 - 1.205750I		
a = -0.864543 - 0.069126I	3.65181 + 5.92897I	-7.49144 - 10.01248I
b = -0.306312 + 0.956199I		
u = -0.223600 + 1.354960I		
a = 0.469907 + 0.958847I	1.78338 + 3.43475I	-2.55385 - 7.61768I
b = 1.330580 + 0.239812I		
u = -0.223600 - 1.354960I		
a = 0.469907 - 0.958847I	1.78338 - 3.43475I	-2.55385 + 7.61768I
b = 1.330580 - 0.239812I		
u = -0.583764 + 0.120670I		
a = 2.27131 + 0.85488I	-2.92328 + 0.50544I	-12.3574 - 10.8616I
b = 1.134100 + 0.298870I		
u = -0.583764 - 0.120670I		
a = 2.27131 - 0.85488I	-2.92328 - 0.50544I	-12.3574 + 10.8616I
b = 1.134100 - 0.298870I		
u = -0.32151 + 1.44044I		
a = -1.66224 - 0.76899I	9.6840 + 16.2255I	-4.63027 - 8.78327I
b = -0.57182 + 1.34966I		
u = -0.32151 - 1.44044I		
a = -1.66224 + 0.76899I	9.6840 - 16.2255I	-4.63027 + 8.78327I
b = -0.57182 - 1.34966I		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 0.29535 + 1.50905I		
a = 0.856616 - 0.740944I	7.47014 - 7.28043I	-3.70614 + 9.00978I
b = 0.284532 + 1.100380I		
u = 0.29535 - 1.50905I		
a = 0.856616 + 0.740944I	7.47014 + 7.28043I	-3.70614 - 9.00978I
b = 0.284532 - 1.100380I		
u = -0.05465 + 1.54501I		
a = 0.003062 + 0.744056I	13.5945 - 5.6631I	-1.19159 + 4.67130I
b = -0.323896 - 1.309710I		
u = -0.05465 - 1.54501I		
a = 0.003062 - 0.744056I	13.5945 + 5.6631I	-1.19159 - 4.67130I
b = -0.323896 + 1.309710I		
u = 0.284375		
a = -0.694884	-0.608310	-16.5880
b = 0.268925		

II.
$$I_2^u = \langle 8u^{20}a - 2u^{20} + \dots - a - 2, -2u^{20}a + 3u^{20} + \dots + a^2 + 10, u^{21} + u^{20} + \dots - u - 1 \rangle$$

(i) Arc colorings

$$a_{6} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_{2} = \begin{pmatrix} -\frac{8}{9}u^{20}a + \frac{2}{9}u^{20} + \dots + \frac{1}{9}a + \frac{2}{9} \end{pmatrix}$$

$$a_{7} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

$$a_{5} = \begin{pmatrix} \frac{2}{9}u^{20}a - \frac{14}{9}u^{20} + \dots + \frac{2}{9}a - \frac{5}{9} \\ -\frac{4}{9}u^{20}a - \frac{8}{9}u^{20} + \dots + \frac{5}{9}a + \frac{10}{9} \end{pmatrix}$$

$$a_{3} = \begin{pmatrix} -u^{20} - 9u^{18} + \dots - u^{2} + 1 \\ -u^{20} - u^{19} + \dots - u^{2} + 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u^{3} + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u^{3} + u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^{2} + 1 \\ u^{4} + 2u^{2} \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -\frac{5}{9}u^{20}a + \frac{8}{9}u^{20} + \dots + \frac{4}{9}a - \frac{1}{9} \\ -\frac{11}{9}u^{20}a + \frac{5}{9}u^{20} + \dots - \frac{2}{9}a - \frac{4}{9} \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^{3} + 2u \\ u^{3} + u \end{pmatrix}$$

$$a_{20} = \begin{pmatrix} u^{3} + 2u \\ u^{3} + u \end{pmatrix}$$

$$a_{3} = \begin{pmatrix} -\frac{1}{9}u^{20}a - \frac{2}{9}u^{20} + \dots + \frac{8}{9}a + \frac{7}{9} \\ 2u^{20} + 2u^{19} + \dots + 2u + 2 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} -\frac{1}{9}u^{20}a - \frac{2}{9}u^{20} + \dots + \frac{8}{9}a + \frac{7}{9} \\ 2u^{20} + 2u^{19} + \dots + 2u + 2 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes =
$$-4u^{19} - 4u^{18} - 36u^{17} - 32u^{16} - 132u^{15} - 100u^{14} - 244u^{13} - 140u^{12} - 216u^{11} - 52u^{10} - 40u^9 + 68u^8 + 56u^7 + 52u^6 - 12u^4 - 36u^3 - 12u^2 - 8u - 6u^4 - 12u^4 - 12$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{42} - u^{41} + \dots + 2496u + 1081$
c_2, c_3, c_5 c_{11}	$u^{42} - 7u^{41} + \dots - 2u + 1$
c_6, c_7, c_{10}	$(u^{21} - u^{20} + \dots - u + 1)^2$
c_8	$(u^{21} - u^{20} + \dots + u - 1)^2$
c_9	$(u^{21} + u^{20} + \dots - 3u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{42} + 19y^{41} + \dots + 26506988y + 1168561$
c_2, c_3, c_5 c_{11}	$y^{42} + 27y^{41} + \dots + 26y^2 + 1$
c_6, c_7, c_{10}	$(y^{21} + 19y^{20} + \dots + 3y - 1)^2$
c ₈	$(y^{21} + 7y^{20} + \dots + 3y - 1)^2$
c_9	$(y^{21} - y^{20} + \dots + 3y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 0.199184 + 0.953331I		
a = -0.631854 - 0.459630I	1.91999 - 2.68588I	-9.85070 + 3.67518I
b = -0.518967 + 0.275770I		
u = 0.199184 + 0.953331I		
a = 0.378897 + 0.152272I	1.91999 - 2.68588I	-9.85070 + 3.67518I
b = 0.359361 + 0.936794I		
u = 0.199184 - 0.953331I		
a = -0.631854 + 0.459630I	1.91999 + 2.68588I	-9.85070 - 3.67518I
b = -0.518967 - 0.275770I		
u = 0.199184 - 0.953331I		
a = 0.378897 - 0.152272I	1.91999 + 2.68588I	-9.85070 - 3.67518I
b = 0.359361 - 0.936794I		
u = -0.268883 + 0.739769I		
a = -0.921198 - 0.860900I	2.12997 - 2.73152I	-8.80842 + 2.00184I
b = -0.764352 + 0.086691I		
u = -0.268883 + 0.739769I		
a = -0.108391 + 0.403964I	2.12997 - 2.73152I	-8.80842 + 2.00184I
b = 0.423673 + 1.154260I		
u = -0.268883 - 0.739769I		
a = -0.921198 + 0.860900I	2.12997 + 2.73152I	-8.80842 - 2.00184I
b = -0.764352 - 0.086691I		
u = -0.268883 - 0.739769I		
a = -0.108391 - 0.403964I	2.12997 + 2.73152I	-8.80842 - 2.00184I
b = 0.423673 - 1.154260I		
u = -0.721828 + 0.253446I		
a = -1.72355 - 0.58410I	0.38553 + 6.51836I	-11.49661 - 6.69162I
b = -1.029770 - 0.113619I		
u = -0.721828 + 0.253446I		
a = 2.02082 - 0.78488I	0.38553 + 6.51836I	-11.49661 - 6.69162I
b = 0.580475 - 1.281080I		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = -0.721828 - 0.253446I		
a = -1.72355 + 0.58410I	0.38553 - 6.51836I	-11.49661 + 6.69162I
b = -1.029770 + 0.113619I		
u = -0.721828 - 0.253446I		
a = 2.02082 + 0.78488I	0.38553 - 6.51836I	-11.49661 + 6.69162I
b = 0.580475 + 1.281080I		
u = 0.708881 + 0.196468I		
a = -1.228480 - 0.496280I	-0.369814 - 0.901098I	-13.44354 + 1.25880I
b = -0.135993 - 0.853092I		
u = 0.708881 + 0.196468I		
a = 0.072151 + 0.168216I	-0.369814 - 0.901098I	-13.44354 + 1.25880I
b = 0.193105 - 0.268938I		
u = 0.708881 - 0.196468I		
a = -1.228480 + 0.496280I	-0.369814 + 0.901098I	-13.44354 - 1.25880I
b = -0.135993 + 0.853092I		
u = 0.708881 - 0.196468I		
a = 0.072151 - 0.168216I	-0.369814 + 0.901098I	-13.44354 - 1.25880I
b = 0.193105 + 0.268938I		
u = 0.161237 + 1.327480I		
a = 2.14675 - 0.60357I	6.68759 - 2.26276I	-8.12423 + 3.11409I
b = 0.215364 - 0.842067I		
u = 0.161237 + 1.327480I		
a = 0.45038 - 2.86282I	6.68759 - 2.26276I	-8.12423 + 3.11409I
b = 0.077855 + 1.154110I		
u = 0.161237 - 1.327480I		
a = 2.14675 + 0.60357I	6.68759 + 2.26276I	-8.12423 - 3.11409I
b = 0.215364 + 0.842067I		
u = 0.161237 - 1.327480I		
a = 0.45038 + 2.86282I	6.68759 + 2.26276I	-8.12423 - 3.11409I
b = 0.077855 - 1.154110I		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = -0.520195 + 0.340511I		
a = -0.049542 - 1.209510I	5.31141 + 1.59690I	-4.86726 - 4.73829I
b = -0.354858 - 1.344690I		
u = -0.520195 + 0.340511I		
a = -2.65329 + 0.61691I	5.31141 + 1.59690I	-4.86726 - 4.73829I
b = -0.538046 + 1.172550I		
u = -0.520195 - 0.340511I		
a = -0.049542 + 1.209510I	5.31141 - 1.59690I	-4.86726 + 4.73829I
b = -0.354858 + 1.344690I		
u = -0.520195 - 0.340511I		
a = -2.65329 - 0.61691I	5.31141 - 1.59690I	-4.86726 + 4.73829I
b = -0.538046 - 1.172550I		
u = 0.280467 + 1.374360I		
a = 0.312181 + 0.269648I	4.61079 - 4.48385I	-8.56586 + 2.47352I
b = 0.406166 - 0.029756I		
u = 0.280467 + 1.374360I		
a = -1.52575 + 0.72271I	4.61079 - 4.48385I	-8.56586 + 2.47352I
b = -0.211636 - 1.044900I		
u = 0.280467 - 1.374360I		
a = 0.312181 - 0.269648I	4.61079 + 4.48385I	-8.56586 - 2.47352I
b = 0.406166 + 0.029756I		
u = 0.280467 - 1.374360I		
a = -1.52575 - 0.72271I	4.61079 + 4.48385I	-8.56586 - 2.47352I
b = -0.211636 + 1.044900I		
u = -0.085311 + 1.403890I		
a = -0.476783 - 0.880832I	8.43398 - 1.80763I	-3.74093 + 2.73625I
b = 0.23480 + 1.42238I		
u = -0.085311 + 1.403890I		
a = -0.310639 - 0.651382I	8.43398 - 1.80763I	-3.74093 + 2.73625I
b = -0.881295 - 0.383290I		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = -0.085311 - 1.403890I		
a = -0.476783 + 0.880832I	8.43398 + 1.80763I	-3.74093 - 2.73625I
b = 0.23480 - 1.42238I		
u = -0.085311 - 1.403890I		
a = -0.310639 + 0.651382I	8.43398 + 1.80763I	-3.74093 - 2.73625I
b = -0.881295 + 0.383290I		
u = -0.20569 + 1.41170I		
a = 0.479429 + 0.350972I	10.87740 + 4.29720I	-1.24857 - 3.93304I
b = -0.41262 - 1.50197I		
u = -0.20569 + 1.41170I		
a = -1.63387 - 0.79459I	10.87740 + 4.29720I	-1.24857 - 3.93304I
b = -0.70246 + 1.26246I		
u = -0.20569 - 1.41170I		
a = 0.479429 - 0.350972I	10.87740 - 4.29720I	-1.24857 + 3.93304I
b = -0.41262 + 1.50197I		
u = -0.20569 - 1.41170I		
a = -1.63387 + 0.79459I	10.87740 - 4.29720I	-1.24857 + 3.93304I
b = -0.70246 - 1.26246I		
u = -0.28719 + 1.40273I		
a = -0.607054 - 0.791979I	5.66073 + 10.18330I	-6.74618 - 7.21296I
b = -1.149010 - 0.072988I		
u = -0.28719 + 1.40273I		
a = 1.67005 + 0.78565I	5.66073 + 10.18330I	-6.74618 - 7.21296I
b = 0.61911 - 1.37353I		
u = -0.28719 - 1.40273I		
a = -0.607054 + 0.791979I	5.66073 - 10.18330I	-6.74618 + 7.21296I
b = -1.149010 + 0.072988I		
u = -0.28719 - 1.40273I		
a = 1.67005 - 0.78565I	5.66073 - 10.18330I	-6.74618 + 7.21296I
b = 0.61911 + 1.37353I		

	Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u =	0.478663		
a =	5.33975 + 3.09458I	2.46606	-16.2150
b =	0.089091 - 1.011840I		
u =	0.478663		
a =	5.33975 - 3.09458I	2.46606	-16.2150
b =	0.089091 + 1.011840I		

III.
$$I_3^u = \langle b+1, 2u^2 + 2a - 2u + 5, u^3 - u^2 + 2u - 1 \rangle$$

(i) Arc colorings

$$a_{6} = \begin{pmatrix} 1\\0 \end{pmatrix}$$

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

$$a_{2} = \begin{pmatrix} -u^{2} + u - \frac{5}{2}\\-1 \end{pmatrix}$$

$$a_{7} = \begin{pmatrix} 1\\u^{2} \end{pmatrix}$$

$$a_{5} = \begin{pmatrix} -u^{2} + u - \frac{3}{2}\\-1 \end{pmatrix}$$

$$a_{3} = \begin{pmatrix} -2u^{2} + 2u - 4\\-2 \end{pmatrix}$$

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

$$a_{8} = \begin{pmatrix} u^{2} + 1\\u^{2} - u + 1 \end{pmatrix}$$

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

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

$$a_{3} = \begin{pmatrix} u^{2} + 1\\u^{2} - u + 1 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} -u^{2} + u - 2\\-\frac{1}{2}u - 1 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} -u^{2} + u - 2\\-\frac{1}{2}u - 1 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} -u^{2} + u - 2\\-\frac{1}{2}u - 1 \end{pmatrix}$$

- (ii) Obstruction class = 1
- (iii) Cusp Shapes = $\frac{1}{4}u 10$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$8(8u^3 - 4u^2 + 1)$
c_2, c_{11}	$(u-1)^3$
c_3, c_5	$(u+1)^3$
c_4	$8(8u^3 + 4u^2 - 1)$
c_6, c_7	$u^3 - u^2 + 2u - 1$
c ₈	u^3
<i>c</i> ₉	$u^3 - u^2 + 1$
c_{10}	$u^3 + u^2 + 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$64(64y^3 - 16y^2 + 8y - 1)$
c_2, c_3, c_5 c_{11}	$(y-1)^3$
c_6, c_7, c_{10}	$y^3 + 3y^2 + 2y - 1$
<i>C</i> ₈	y^3
c_9	$y^3 - y^2 + 2y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 0.215080 + 1.307140I		
a = -0.622561 + 0.744862I	1.37919 - 2.82812I	-9.94623 + 0.32679I
b = -1.00000		
u = 0.215080 - 1.307140I		
a = -0.622561 - 0.744862I	1.37919 + 2.82812I	-9.94623 - 0.32679I
b = -1.00000		
u = 0.569840		
a = -2.25488	-2.75839	-9.85750
b = -1.00000		

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$64(8u^3 - 4u^2 + 1)(8u^{25} - 4u^{24} + \dots + 2u + 1)$ $\cdot (u^{42} - u^{41} + \dots + 2496u + 1081)$
c_2, c_{11}	$((u-1)^3)(u^{25} + 3u^{24} + \dots + 3u + 1)(u^{42} - 7u^{41} + \dots - 2u + 1)$
c_3, c_5	$((u+1)^3)(u^{25}+3u^{24}+\cdots+3u+1)(u^{42}-7u^{41}+\cdots-2u+1)$
c_4	$64(8u^3 + 4u^2 - 1)(8u^{25} - 4u^{24} + \dots + 2u + 1)$ $\cdot (u^{42} - u^{41} + \dots + 2496u + 1081)$
c_6, c_7	$ (u^3 - u^2 + 2u - 1)(u^{21} - u^{20} + \dots - u + 1)^2(u^{25} + 11u^{23} + \dots + 5u + 4) $
c_8	$u^{3}(u^{21} - u^{20} + \dots + u - 1)^{2}(u^{25} + 3u^{24} + \dots + 352u + 128)$
c_9	$(u^3 - u^2 + 1)(u^{21} + u^{20} + \dots - 3u + 1)^2(u^{25} - u^{23} + \dots + 797u + 292)$
c_{10}	$(u^3 + u^2 + 2u + 1)(u^{21} - u^{20} + \dots - u + 1)^2(u^{25} + 11u^{23} + \dots + 5u + 4)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$4096(64y^{3} - 16y^{2} + 8y - 1)(64y^{25} + 240y^{24} + \dots + 16y - 1)$ $\cdot (y^{42} + 19y^{41} + \dots + 26506988y + 1168561)$
$c_2, c_3, c_5 \ c_{11}$	$((y-1)^3)(y^{25}+11y^{24}+\cdots+3y-1)(y^{42}+27y^{41}+\cdots+26y^2+1)$
c_6, c_7, c_{10}	$(y^3 + 3y^2 + 2y - 1)(y^{21} + 19y^{20} + \dots + 3y - 1)^2$ $\cdot (y^{25} + 22y^{24} + \dots + 241y - 16)$
c_8	$y^{3}(y^{21} + 7y^{20} + \dots + 3y - 1)^{2}(y^{25} + 7y^{24} + \dots - 84992y - 16384)$
<i>c</i> ₉	$(y^3 - y^2 + 2y - 1)(y^{21} - y^{20} + \dots + 3y - 1)^2$ $\cdot (y^{25} - 2y^{24} + \dots + 1188257y - 85264)$