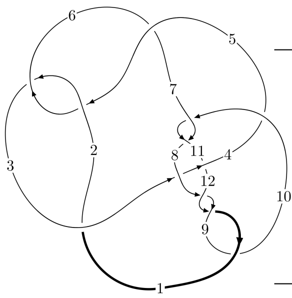
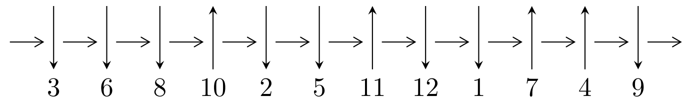
$12a_{0290}$ ($K12a_{0290}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I^u_1 = \langle 1.57175 \times 10^{132} u^{87} + 1.72314 \times 10^{133} u^{86} + \cdots + 9.74392 \times 10^{132} b + 5.16952 \times 10^{132},$$
$$6.77338 \times 10^{132} u^{87} + 6.23699 \times 10^{133} u^{86} + \cdots + 9.74392 \times 10^{132} a - 1.46464 \times 10^{132},\ u^{88} + 7u^{87} + \cdots + 6u$$
$$I^u_2 = \langle b + 1,\ 2a - u,\ u^2 - 2\rangle$$

$$I^v_1 = \langle a,\ b - 1,\ v + 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 91 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. $\boldsymbol{I_1^u = \langle 1.57 \times 10^{132} u^{87} + 1.72 \times 10^{133} u^{86} + \cdots + 9.74 \times 10^{132} b + 5.17 \times 10^{132},\ 6.77 \times 10^{132} u^{87} + 6.24 \times 10^{133} u^{86} + \cdots + 9.74 \times 10^{132} a - 1.46 \times 10^{132},\ u^{88} + 7u^{87} + \cdots + 6u - 2 \rangle}$

(i) Arc colorings

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -0.695139u^{87} - 6.40091u^{86} + \cdots - 9.75797u + 0.150314 \\ -0.161305u^{87} - 1.76843u^{86} + \cdots + 3.10463u - 0.530538 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0.671807u^{87} + 4.32742u^{86} + \cdots - 10.5704u + 1.48658 \\ 1.00155u^{87} + 7.58488u^{86} + \cdots - 0.307323u + 0.452612 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1.42894u^{87} + 10.3800u^{86} + \cdots - 14.0642u + 1.94160 \\ 1.96278u^{87} + 15.0125u^{86} + \cdots - 1.20156u + 1.26075 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1.09670u^{87} + 5.26132u^{86} + \cdots + 11.8149u - 1.97450 \\ 0.586103u^{87} + 0.737960u^{86} + \cdots + 12.2825u - 4.91592 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -0.555259u^{87} - 2.94764u^{86} + \cdots - 12.5540u + 2.00113 \\ -0.932863u^{87} - 5.26350u^{86} + \cdots - 0.350537u - 0.580112 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 0.555259u^{87} + 2.94764u^{86} + \cdots + 12.5540u - 2.00113 \\ 0.445220u^{87} + 2.37310u^{86} + \cdots + 6.39498u - 2.45844 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -0.986580u^{87} - 5.40335u^{86} + \cdots + 0.0651781u + 0.914542 \\ -0.613296u^{87} - 1.77328u^{86} + \cdots - 8.33907u + 2.76232 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4.29383u^{87} - 32.7289u^{86} + \cdots - 26.3353u + 8.92622$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{88} + 28u^{87} + \cdots - 66u + 1$
c_2, c_5	$u^{88} + 4u^{87} + \cdots + 2u + 1$
c_3	$u^{88} - 26u^{87} + \cdots + 4u + 1$
c_4	$u^{88} + 32u^{87} + \cdots - 17646936u - 2939221$
c_7, c_{10}	$u^{88} - 2u^{87} + \cdots - 34u - 1$
c_8, c_9, c_{12}	$u^{88} + 7u^{87} + \cdots + 6u - 2$
c_{11}	$u^{88} - 4u^{87} + \cdots + 10u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{88} + 68y^{87} + \cdots - 1966y + 1$
c_2, c_5	$y^{88} - 28y^{87} + \cdots + 66y + 1$
c_3	$y^{88} - 512y^{87} + \cdots - 758y + 1$
c_4	$y^{88} - 588y^{87} + \cdots - 154392187987162y + 8639020086841$
c_7, c_{10}	$y^{88} - 68y^{87} + \cdots - 630y + 1$
c_8, c_9, c_{12}	$y^{88} - 85y^{87} + \cdots + 28y + 4$
c_{11}	$y^{88} + 4y^{87} + \cdots - 70y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.495208 + 0.877151I$ $a = 0.411455 + 0.753705I$ $b = -1.015090 + 0.935019I$	$7.6509 - 12.9288I$	0
$u = 0.495208 - 0.877151I$ $a = 0.411455 - 0.753705I$ $b = -1.015090 - 0.935019I$	$7.6509 + 12.9288I$	0
$u = -0.281152 + 0.967426I$ $a = -0.291698 + 0.134353I$ $b = 0.472094 + 0.654902I$	$2.59156 + 1.21821I$	0
$u = -0.281152 - 0.967426I$ $a = -0.291698 - 0.134353I$ $b = 0.472094 - 0.654902I$	$2.59156 - 1.21821I$	0
$u = 0.444403 + 0.862629I$ $a = -0.409808 - 0.736494I$ $b = 1.025420 - 0.939996I$	$8.42853 - 6.77648I$	0
$u = 0.444403 - 0.862629I$ $a = -0.409808 + 0.736494I$ $b = 1.025420 + 0.939996I$	$8.42853 + 6.77648I$	0
$u = -0.612876 + 0.708935I$ $a = 0.346947 - 0.372276I$ $b = -0.395815 - 0.656615I$	$-2.85481 + 2.65153I$	0
$u = -0.612876 - 0.708935I$ $a = 0.346947 + 0.372276I$ $b = -0.395815 + 0.656615I$	$-2.85481 - 2.65153I$	0
$u = -0.386006 + 1.003120I$ $a = 0.270380 - 0.196109I$ $b = -0.456111 - 0.671602I$	$2.15335 + 6.83792I$	0
$u = -0.386006 - 1.003120I$ $a = 0.270380 + 0.196109I$ $b = -0.456111 + 0.671602I$	$2.15335 - 6.83792I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.752047 + 0.815149I$ $a = -0.563170 + 0.131031I$ $b = -0.816592 - 0.610525I$	$7.57889 + 1.20760I$	0
$u = 0.752047 - 0.815149I$ $a = -0.563170 - 0.131031I$ $b = -0.816592 + 0.610525I$	$7.57889 - 1.20760I$	0
$u = 0.704958 + 0.876898I$ $a = 0.479501 - 0.130087I$ $b = 0.785629 + 0.624303I$	$7.10312 + 7.15665I$	0
$u = 0.704958 - 0.876898I$ $a = 0.479501 + 0.130087I$ $b = 0.785629 - 0.624303I$	$7.10312 - 7.15665I$	0
$u = -1.174970 + 0.061073I$ $a = -0.00514 - 2.91113I$ $b = -0.18951 - 1.68930I$	$5.02727 + 3.33290I$	0
$u = -1.174970 - 0.061073I$ $a = -0.00514 + 2.91113I$ $b = -0.18951 + 1.68930I$	$5.02727 - 3.33290I$	0
$u = 0.508152 + 0.646507I$ $a = 0.502496 + 0.724043I$ $b = -1.051760 + 0.875815I$	$0.64818 - 7.68033I$	$-4.00000 + 9.27908I$
$u = 0.508152 - 0.646507I$ $a = 0.502496 - 0.724043I$ $b = -1.051760 - 0.875815I$	$0.64818 + 7.68033I$	$-4.00000 - 9.27908I$
$u = 0.385530 + 0.718019I$ $a = 0.210598 - 0.555538I$ $b = 0.667580 + 0.521758I$	$1.01440 + 3.28538I$	$-4.00000 - 6.83921I$
$u = 0.385530 - 0.718019I$ $a = 0.210598 + 0.555538I$ $b = 0.667580 - 0.521758I$	$1.01440 - 3.28538I$	$-4.00000 + 6.83921I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.271860 + 0.189390I$ $a = -1.57244 - 0.54471I$ $b = -1.62915 - 0.67700I$	$3.80798 - 2.18851I$	0
$u = 1.271860 - 0.189390I$ $a = -1.57244 + 0.54471I$ $b = -1.62915 + 0.67700I$	$3.80798 + 2.18851I$	0
$u = 1.30786$ $a = 2.40716$ $b = 2.44403$	-3.20868	0
$u = 0.312791 + 0.615361I$ $a = -0.457552 - 0.634789I$ $b = 1.12009 - 0.93330I$	$3.95546 - 4.04673I$	$2.71866 + 5.71962I$
$u = 0.312791 - 0.615361I$ $a = -0.457552 + 0.634789I$ $b = 1.12009 + 0.93330I$	$3.95546 + 4.04673I$	$2.71866 - 5.71962I$
$u = 0.578857 + 0.359329I$ $a = -1.23689 + 0.76115I$ $b = -0.804602 - 0.317174I$	$2.95975 + 0.61087I$	$0.98547 + 2.25403I$
$u = 0.578857 - 0.359329I$ $a = -1.23689 - 0.76115I$ $b = -0.804602 + 0.317174I$	$2.95975 - 0.61087I$	$0.98547 - 2.25403I$
$u = 1.328780 + 0.000300I$ $a = 0.44226 + 2.75769I$ $b = -0.128258 + 0.645110I$	$-0.20961 - 2.93911I$	0
$u = 1.328780 - 0.000300I$ $a = 0.44226 - 2.75769I$ $b = -0.128258 - 0.645110I$	$-0.20961 + 2.93911I$	0
$u = -1.325330 + 0.124435I$ $a = -0.037394 + 0.440662I$ $b = -0.911325 + 0.455131I$	$-1.304860 + 0.085633I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.325330 - 0.124435I$ $a = -0.037394 - 0.440662I$ $b = -0.911325 - 0.455131I$	$-1.304860 - 0.085633I$	0
$u = 1.355190 + 0.192450I$ $a = 1.51658 + 0.83209I$ $b = 1.63713 + 0.93870I$	$2.27442 - 8.32858I$	0
$u = 1.355190 - 0.192450I$ $a = 1.51658 - 0.83209I$ $b = 1.63713 - 0.93870I$	$2.27442 + 8.32858I$	0
$u = -1.368320 + 0.067286I$ $a = 0.466668 - 0.523121I$ $b = -0.324757 - 0.265684I$	$-3.14744 + 0.11184I$	0
$u = -1.368320 - 0.067286I$ $a = 0.466668 + 0.523121I$ $b = -0.324757 + 0.265684I$	$-3.14744 - 0.11184I$	0
$u = 1.383300 + 0.016208I$ $a = -1.70570 + 5.79045I$ $b = 0.082745 + 0.273472I$	$-0.20747 - 2.85455I$	0
$u = 1.383300 - 0.016208I$ $a = -1.70570 - 5.79045I$ $b = 0.082745 - 0.273472I$	$-0.20747 + 2.85455I$	0
$u = -0.088016 + 0.606452I$ $a = -0.304643 - 0.577626I$ $b = 1.05284 - 1.12404I$	$7.98061 - 0.72495I$	$5.07684 + 0.22833I$
$u = -0.088016 - 0.606452I$ $a = -0.304643 + 0.577626I$ $b = 1.05284 + 1.12404I$	$7.98061 + 0.72495I$	$5.07684 - 0.22833I$
$u = -1.386200 + 0.131809I$ $a = 0.141767 - 0.467812I$ $b = 1.028830 - 0.460792I$	$-2.12556 + 5.58667I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.386200-0.131809I$ $a=\ 0.141767+0.467812I$ $b=\ 1.028830+0.460792I$	$-2.12556-5.58667I$	0
$u=-0.187730+0.577154I$ $a=\ 0.271356+0.574587I$ $b=-0.99826+1.15457I$	$7.13319+5.55022I$	$3.18440-6.17368I$
$u=-0.187730-0.577154I$ $a=\ 0.271356-0.574587I$ $b=-0.99826-1.15457I$	$7.13319-5.55022I$	$3.18440+6.17368I$
$u=-0.603442+0.033860I$ $a=\ 0.196407-0.659993I$ $b=-0.346103-0.850656I$	$-1.47881-1.50127I$	$-9.75731+4.59132I$
$u=-0.603442-0.033860I$ $a=\ 0.196407+0.659993I$ $b=-0.346103+0.850656I$	$-1.47881+1.50127I$	$-9.75731-4.59132I$
$u=-1.40622$ $a=\ 0.301859$ $b=\ 1.14642$	-6.56478	0
$u=\ 1.41892$ $a=-17.7637$ $b=\ 0.0959723$	-4.41271	0
$u=-1.41358+0.13459I$ $a=\ 0.70257+2.34250I$ $b=\ 1.28835+1.74535I$	$-5.42809+2.53490I$	0
$u=-1.41358-0.13459I$ $a=\ 0.70257-2.34250I$ $b=\ 1.28835-1.74535I$	$-5.42809-2.53490I$	0
$u=-1.32882+0.54023I$ $a=\ 0.185595-0.497662I$ $b=-0.302391-0.629403I$	$-0.626564-0.632614I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.32882 - 0.54023I$ $a = 0.185595 + 0.497662I$ $b = -0.302391 + 0.629403I$	$-0.626564 + 0.632614I$	0
$u = -1.42235 + 0.21993I$ $a = -0.32909 - 2.17060I$ $b = -1.08443 - 1.47205I$	$-1.60919 + 7.07285I$	0
$u = -1.42235 - 0.21993I$ $a = -0.32909 + 2.17060I$ $b = -1.08443 + 1.47205I$	$-1.60919 - 7.07285I$	0
$u = 1.43564 + 0.16847I$ $a = 0.16509 + 1.64037I$ $b = -0.549615 + 1.090380I$	$-5.77675 - 3.38269I$	0
$u = 1.43564 - 0.16847I$ $a = 0.16509 - 1.64037I$ $b = -0.549615 - 1.090380I$	$-5.77675 + 3.38269I$	0
$u = -0.289821 + 0.442277I$ $a = -0.750944 + 0.488100I$ $b = 0.357107 + 0.565907I$	$-0.130405 + 1.105450I$	$-2.09917 - 6.01174I$
$u = -0.289821 - 0.442277I$ $a = -0.750944 - 0.488100I$ $b = 0.357107 - 0.565907I$	$-0.130405 - 1.105450I$	$-2.09917 + 6.01174I$
$u = -0.511705 + 0.082203I$ $a = -0.71931 + 4.95483I$ $b = 0.076717 + 0.762273I$	$5.46748 - 2.98633I$	$-9.54273 + 0.07763I$
$u = -0.511705 - 0.082203I$ $a = -0.71931 - 4.95483I$ $b = 0.076717 - 0.762273I$	$5.46748 + 2.98633I$	$-9.54273 - 0.07763I$
$u = 1.49176 + 0.09347I$ $a = 0.04638 - 1.73361I$ $b = 0.526261 - 1.275590I$	$-8.28685 + 0.58022I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.49176 - 0.09347I$ $a = 0.04638 + 1.73361I$ $b = 0.526261 + 1.275590I$	$-8.28685 - 0.58022I$	0
$u = 1.45601 + 0.33912I$ $a = 0.213193 + 1.364660I$ $b = -0.705900 + 1.030080I$	$-3.01725 - 5.77701I$	0
$u = 1.45601 - 0.33912I$ $a = 0.213193 - 1.364660I$ $b = -0.705900 - 1.030080I$	$-3.01725 + 5.77701I$	0
$u = -1.49951 + 0.23063I$ $a = 0.31462 + 1.91220I$ $b = 1.16988 + 1.31138I$	$-5.86501 + 10.90410I$	0
$u = -1.49951 - 0.23063I$ $a = 0.31462 - 1.91220I$ $b = 1.16988 - 1.31138I$	$-5.86501 - 10.90410I$	0
$u = -1.50089 + 0.31943I$ $a = -0.08694 - 1.91626I$ $b = -1.04827 - 1.23901I$	$2.16726 + 11.06000I$	0
$u = -1.50089 - 0.31943I$ $a = -0.08694 + 1.91626I$ $b = -1.04827 + 1.23901I$	$2.16726 - 11.06000I$	0
$u = 1.52101 + 0.22715I$ $a = -0.07136 - 1.47097I$ $b = 0.670679 - 1.121100I$	$-9.75078 - 5.99442I$	0
$u = 1.52101 - 0.22715I$ $a = -0.07136 + 1.47097I$ $b = 0.670679 + 1.121100I$	$-9.75078 + 5.99442I$	0
$u = 1.49977 + 0.35416I$ $a = -0.169871 - 1.334190I$ $b = 0.726021 - 1.048360I$	$-3.92744 - 11.62280I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.49977 - 0.35416I$ $a = -0.169871 + 1.334190I$ $b = 0.726021 + 1.048360I$	$-3.92744 + 11.62280I$	0
$u = -1.44949 + 0.53145I$ $a = -0.163719 + 0.509241I$ $b = 0.266614 + 0.630247I$	$-0.92471 + 4.84296I$	0
$u = -1.44949 - 0.53145I$ $a = -0.163719 - 0.509241I$ $b = 0.266614 - 0.630247I$	$-0.92471 - 4.84296I$	0
$u = 0.138985 + 0.421598I$ $a = -2.15402 + 0.79461I$ $b = 0.495998 + 0.378459I$	$3.24864 + 1.94975I$	$1.19053 - 4.83237I$
$u = 0.138985 - 0.421598I$ $a = -2.15402 - 0.79461I$ $b = 0.495998 - 0.378459I$	$3.24864 - 1.94975I$	$1.19053 + 4.83237I$
$u = 0.214419 + 0.386537I$ $a = 2.09607 - 0.79831I$ $b = -0.523520 - 0.343025I$	$2.99114 - 3.65929I$	$-0.015901 + 1.155769I$
$u = 0.214419 - 0.386537I$ $a = 2.09607 + 0.79831I$ $b = -0.523520 + 0.343025I$	$2.99114 + 3.65929I$	$-0.015901 - 1.155769I$
$u = -1.52678 + 0.32069I$ $a = 0.08431 + 1.86114I$ $b = 1.06520 + 1.21191I$	$1.1224 + 17.2916I$	0
$u = -1.52678 - 0.32069I$ $a = 0.08431 - 1.86114I$ $b = 1.06520 - 1.21191I$	$1.1224 - 17.2916I$	0
$u = 0.236533 + 0.350847I$ $a = 0.500224 + 0.460847I$ $b = -1.36632 + 0.90743I$	$-0.050934 - 0.701211I$	$-0.63507 + 10.01092I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.236533 - 0.350847I$ $a = 0.500224 - 0.460847I$ $b = -1.36632 - 0.90743I$	$-0.050934 + 0.701211I$	$-0.63507 - 10.01092I$
$u = -1.59145 + 0.26362I$ $a = -0.134574 + 0.593608I$ $b = 0.167504 + 0.553471I$	$-5.30315 + 0.91565I$	0
$u = -1.59145 - 0.26362I$ $a = -0.134574 - 0.593608I$ $b = 0.167504 - 0.553471I$	$-5.30315 - 0.91565I$	0
$u = -0.044960 + 0.270419I$ $a = -6.63109 - 1.30460I$ $b = 0.334940 + 0.390113I$	$0.341234 - 0.326787I$	$14.7581 - 8.3281I$
$u = -0.044960 - 0.270419I$ $a = -6.63109 + 1.30460I$ $b = 0.334940 - 0.390113I$	$0.341234 + 0.326787I$	$14.7581 + 8.3281I$
$u = -1.78630 + 0.04448I$ $a = -0.015880 + 0.601472I$ $b = 0.020823 + 0.591274I$	$-1.85916 - 2.69456I$	0
$u = -1.78630 - 0.04448I$ $a = -0.015880 - 0.601472I$ $b = 0.020823 - 0.591274I$	$-1.85916 + 2.69456I$	0
$u = 0.208416$ $a = 2.54821$ $b = -0.467771$	-1.37179	-7.17100

II. $I_2^u = \langle b+1,\ 2a-u,\ u^2-2\rangle$

(i) Arc colorings

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

$a_{12} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$

$a_1 = \begin{pmatrix} 1 \\ 2 \end{pmatrix}$

$a_4 = \begin{pmatrix} \frac{1}{2}u \\ -1 \end{pmatrix}$

$a_{10} = \begin{pmatrix} -u \\ -u \end{pmatrix}$

$a_5 = \begin{pmatrix} -\frac{1}{2}u-2 \\ -u-3 \end{pmatrix}$

$a_8 = \begin{pmatrix} u \\ u \end{pmatrix}$

$a_3 = \begin{pmatrix} -\frac{1}{2}u-2 \\ -u-3 \end{pmatrix}$

$a_2 = \begin{pmatrix} -\frac{1}{2}u-1 \\ -u-1 \end{pmatrix}$

$a_{11} = \begin{pmatrix} -\frac{1}{2}u+1 \\ 1 \end{pmatrix}$

$a_7 = \begin{pmatrix} \frac{1}{2}u+1 \\ u+1 \end{pmatrix}$

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -8$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_7	$(u-1)^2$
c_3	$u^2 - 2u - 1$
c_4	$u^2 + 2u - 1$
c_5, c_6, c_{10} c_{11}	$(u+1)^2$
c_8, c_9, c_{12}	$u^2 - 2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_5 c_6, c_7, c_{10} c_{11}	$(y-1)^2$
c_3, c_4	$y^2 - 6y + 1$
c_8, c_9, c_{12}	$(y-2)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.41421$ $a = 0.707107$ $b = -1.00000$	-4.93480	-8.00000
$u = -1.41421$ $a = -0.707107$ $b = -1.00000$	-4.93480	-8.00000

III. $I_1^v = \langle a,\ b-1,\ v+1 \rangle$

(i) Arc colorings

$$a_9 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2 \\ 1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

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

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 0$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_3 c_4, c_{10}, c_{11}	$u-1$
c_5, c_6, c_7	$u+1$
c_8, c_9, c_{12}	u

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_4, c_5, c_6 c_7, c_{10}, c_{11}	$y-1$
c_8, c_9, c_{12}	y

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$v = -1.00000$ $a = 0$ $b = 1.00000$	0	0

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^3)(u^{88}+28u^{87}+\cdots-66u+1)$
c_2	$((u-1)^3)(u^{88}+4u^{87}+\cdots+2u+1)$
c_3	$(u-1)(u^2-2u-1)(u^{88}-26u^{87}+\cdots+4u+1)$
c_4	$(u-1)(u^2+2u-1)(u^{88}+32u^{87}+\cdots-1.76469\times10^7u-2939221)$
c_5	$((u+1)^3)(u^{88}+4u^{87}+\cdots+2u+1)$
c_6	$((u+1)^3)(u^{88}+28u^{87}+\cdots-66u+1)$
c_7	$((u-1)^2)(u+1)(u^{88}-2u^{87}+\cdots-34u-1)$
c_8, c_9, c_{12}	$u(u^2-2)(u^{88}+7u^{87}+\cdots+6u-2)$
c_{10}	$(u-1)(u+1)^2(u^{88}-2u^{87}+\cdots-34u-1)$
c_{11}	$(u-1)(u+1)^2(u^{88}-4u^{87}+\cdots+10u-1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$((y-1)^3)(y^{88}+68y^{87}+\cdots-1966y+1)$
c_2, c_5	$((y-1)^3)(y^{88}-28y^{87}+\cdots+66y+1)$
c_3	$(y-1)(y^2-6y+1)(y^{88}-512y^{87}+\cdots-758y+1)$
c_4	$(y-1)(y^2-6y+1)$ $\cdot\,(y^{88}-588y^{87}+\cdots-154392187987162y+8639020086841)$
c_7, c_{10}	$((y-1)^3)(y^{88}-68y^{87}+\cdots-630y+1)$
c_8, c_9, c_{12}	$y(y-2)^2(y^{88}-85y^{87}+\cdots+28y+4)$
c_{11}	$((y-1)^3)(y^{88}+4y^{87}+\cdots-70y+1)$