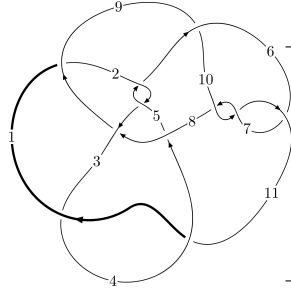
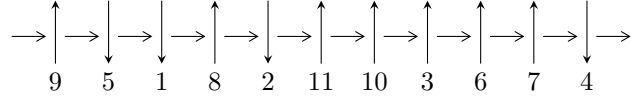


11a₂₉₄ (K11a₂₉₄)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -8634895226u^{23} - 5433253456u^{22} + \dots + 735180934969b - 781237782063, \\ 763967991611u^{23} + 23673073992u^{22} + \dots + 2940723739876a + 7856566749775, \\ u^{24} + 10u^{22} + \dots + 15u - 4 \rangle$$

$$I_2^u = \langle u^{19}a + 2u^{19} + \dots - 2a - 1, -2u^{19}a - 4u^{19} + \dots + 6a + 15, u^{20} - u^{19} + \dots - 2u - 1 \rangle$$

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

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 67 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>).

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

$$\mathbf{I. } I_1^u = \langle -8.63 \times 10^9 u^{23} - 5.43 \times 10^9 u^{22} + \dots + 7.35 \times 10^{11} b - 7.81 \times 10^{11}, 7.64 \times 10^{11} u^{23} + 2.37 \times 10^{10} u^{22} + \dots + 2.94 \times 10^{12} a + 7.86 \times 10^{12}, u^{24} + 10u^{22} + \dots + 15u - 4 \rangle$$

(i) Arc colorings

$$\begin{aligned} a_6 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_2 &= \begin{pmatrix} -0.259789u^{23} - 0.00805008u^{22} + \dots + 6.57173u - 2.67164 \\ 0.0117453u^{23} + 0.00739036u^{22} + \dots - 0.781959u + 1.06265 \end{pmatrix} \\ a_7 &= \begin{pmatrix} 1 \\ -u^2 \end{pmatrix} \\ a_5 &= \begin{pmatrix} 0.249773u^{23} - 0.00306836u^{22} + \dots - 5.95799u + 2.87741 \\ -0.0126772u^{23} - 0.0249283u^{22} + \dots + 1.51797u - 1.05571 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -0.517622u^{23} - 0.0138817u^{22} + \dots + 12.5338u - 5.08757 \\ 0.0138817u^{23} + 0.00372967u^{22} + \dots - 2.67676u + 2.07049 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} -u \\ u^3 + u \end{pmatrix} \\ a_8 &= \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 0.265662u^{23} + 0.0117453u^{22} + \dots - 6.46270u + 3.20297 \\ -0.00805008u^{23} + 0.0403920u^{22} + \dots + 1.22519u - 1.03916 \end{pmatrix} \\ a_9 &= \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix} \\ a_1 &= \begin{pmatrix} -0.263929u^{23} - 0.0126772u^{22} + \dots + 6.43357u - 2.44096 \\ -0.00306836u^{23} - 0.0138773u^{22} + \dots - 0.869183u + 0.999092 \end{pmatrix} \\ a_1 &= \begin{pmatrix} -0.263929u^{23} - 0.0126772u^{22} + \dots + 6.43357u - 2.44096 \\ -0.00306836u^{23} - 0.0138773u^{22} + \dots - 0.869183u + 0.999092 \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes

$$= \frac{818436095265}{735180934969} u^{23} + \frac{92606395200}{735180934969} u^{22} + \dots - \frac{104556151676103}{2940723739876} u + \frac{5519991831807}{735180934969}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$8(8u^{24} - 12u^{23} + \dots - u + 1)$
c_2, c_3, c_5 c_{11}	$u^{24} + 3u^{23} + \dots + 6u - 1$
c_6, c_7, c_{10}	$u^{24} + 10u^{22} + \dots - 15u - 4$
c_8	$u^{24} + 3u^{23} + \dots + 224u + 128$
c_9	$u^{24} - 6u^{22} + \dots - 1079u - 676$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$64(64y^{24} - 656y^{23} + \dots - 7y + 1)$
c_2, c_3, c_5 c_{11}	$y^{24} + 13y^{23} + \dots - 38y + 1$
c_6, c_7, c_{10}	$y^{24} + 20y^{23} + \dots - 97y + 16$
c_8	$y^{24} - 7y^{23} + \dots - 226304y + 16384$
c_9	$y^{24} - 12y^{23} + \dots - 1380561y + 456976$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.021460 + 0.275515I$		
$a = 0.39552 - 1.65501I$	$7.49230 - 1.49785I$	$16.5794 + 3.5131I$
$b = 0.047276 + 1.186360I$		
$u = -1.021460 - 0.275515I$		
$a = 0.39552 + 1.65501I$	$7.49230 + 1.49785I$	$16.5794 - 3.5131I$
$b = 0.047276 - 1.186360I$		
$u = 0.870278 + 0.206907I$		
$a = -0.50041 - 2.31304I$	$9.3482 + 11.6156I$	$9.04984 - 7.14425I$
$b = -0.49469 + 1.37599I$		
$u = 0.870278 - 0.206907I$		
$a = -0.50041 + 2.31304I$	$9.3482 - 11.6156I$	$9.04984 + 7.14425I$
$b = -0.49469 - 1.37599I$		
$u = -0.711520 + 0.880248I$		
$a = -0.496210 + 1.180490I$	$5.61526 - 4.36903I$	$11.9512 + 7.5869I$
$b = -0.138302 - 1.193200I$		
$u = -0.711520 - 0.880248I$		
$a = -0.496210 - 1.180490I$	$5.61526 + 4.36903I$	$11.9512 - 7.5869I$
$b = -0.138302 + 1.193200I$		
$u = 0.507475 + 1.020800I$		
$a = 0.471884 + 1.006850I$	$6.85359 - 6.74871I$	$7.12828 + 3.44529I$
$b = -0.411983 - 1.346680I$		
$u = 0.507475 - 1.020800I$		
$a = 0.471884 - 1.006850I$	$6.85359 + 6.74871I$	$7.12828 - 3.44529I$
$b = -0.411983 + 1.346680I$		
$u = 0.263649 + 1.293920I$		
$a = 0.137301 + 0.951214I$	$-4.17750 + 3.32302I$	$7.49326 - 7.01534I$
$b = 1.347430 + 0.188650I$		
$u = 0.263649 - 1.293920I$		
$a = 0.137301 - 0.951214I$	$-4.17750 - 3.32302I$	$7.49326 + 7.01534I$
$b = 1.347430 - 0.188650I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.102906 + 1.325920I$ $a = 0.978679 + 0.749632I$ $b = 0.912691 - 0.587846I$	$-5.99931 + 2.29383I$	$-3.48033 - 0.30083I$
$u = 0.102906 - 1.325920I$ $a = 0.978679 - 0.749632I$ $b = 0.912691 + 0.587846I$	$-5.99931 - 2.29383I$	$-3.48033 + 0.30083I$
$u = 0.656566$ $a = -1.48947$ $b = 1.29551$	-0.112715	17.2960
$u = -0.181673 + 1.332990I$ $a = -0.477910 + 0.021115I$ $b = -0.263704 + 0.229700I$	$-3.41691 - 2.41506I$	$4.35202 + 1.54076I$
$u = -0.181673 - 1.332990I$ $a = -0.477910 - 0.021115I$ $b = -0.263704 - 0.229700I$	$-3.41691 + 2.41506I$	$4.35202 - 1.54076I$
$u = 0.36901 + 1.39774I$ $a = -1.48756 - 1.23046I$ $b = -0.55509 + 1.37302I$	$4.2704 + 16.0735I$	$4.86533 - 8.67439I$
$u = 0.36901 - 1.39774I$ $a = -1.48756 + 1.23046I$ $b = -0.55509 - 1.37302I$	$4.2704 - 16.0735I$	$4.86533 + 8.67439I$
$u = -0.45316 + 1.40935I$ $a = 0.831561 - 1.018120I$ $b = 0.207861 + 1.159740I$	$2.26090 - 6.77325I$	$8.15326 + 8.68487I$
$u = -0.45316 - 1.40935I$ $a = 0.831561 + 1.018120I$ $b = 0.207861 - 1.159740I$	$2.26090 + 6.77325I$	$8.15326 - 8.68487I$
$u = -0.496850$ $a = -0.482259$ $b = -0.161437$	0.853473	12.2560

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.11292 + 1.52095I$		
$a = -0.621242 + 0.178604I$	$-2.48001 - 6.89114I$	$2.89593 + 8.03535I$
$b = -0.381421 - 1.074640I$		
$u = -0.11292 - 1.52095I$		
$a = -0.621242 - 0.178604I$	$-2.48001 + 6.89114I$	$2.89593 - 8.03535I$
$b = -0.381421 + 1.074640I$		
$u = 0.287554 + 0.235788I$		
$a = -0.37075 + 1.66780I$	$-1.22051 + 0.86188I$	$-4.63925 - 4.32694I$
$b = 0.662890 - 0.292141I$		
$u = 0.287554 - 0.235788I$		
$a = -0.37075 - 1.66780I$	$-1.22051 - 0.86188I$	$-4.63925 + 4.32694I$
$b = 0.662890 + 0.292141I$		

$$\langle u^{19}a + 2u^{19} + \dots - 2a - 1, -2u^{19}a - 4u^{19} + \dots + 6a + 15, u^{20} - u^{19} + \dots - 2u - 1 \rangle$$

II. $I_2^u =$

(i) Arc colorings

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

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

$$a_2 = \begin{pmatrix} a \\ -u^{19}a - 2u^{19} + \dots + 2a + 1 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -2u^{19}a - 4u^{19} + \dots + a + 7 \\ u^{19}a - u^{19} + \dots + 2a + 3 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^{19} - 8u^{17} - 26u^{15} - 42u^{13} - 31u^{11} - 2u^9 + 10u^7 + 4u^5 - u^3 - 2u \\ u^{19} - u^{18} + \dots + 2u + 1 \end{pmatrix}$$

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

$$a_8 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -2u^{19}a - u^{19} + \dots - 7u + 3 \\ -2u^{19} + 2u^{18} + \dots - 2u + 2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -2u^{19}a - u^{19} + \dots + 2a - 2 \\ -u^{18}a - 2u^{19} + \dots + 2a + 2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -2u^{19}a - u^{19} + \dots + 2a - 2 \\ -u^{18}a - 2u^{19} + \dots + 2a + 2 \end{pmatrix}$$

(ii) Obstruction class = -1

$$\text{(iii) Cusp Shapes} = 4u^{18} - 4u^{17} + 32u^{16} - 28u^{15} + 104u^{14} - 76u^{13} + 164u^{12} - 92u^{11} + 104u^{10} - 32u^9 - 28u^8 + 20u^7 - 60u^6 + 4u^5 - 4u^4 - 8u^3 + 16u^2 + 4u + 10$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{40} - 3u^{39} + \dots - 60100u + 13049$
c_2, c_3, c_5 c_{11}	$u^{40} - 7u^{39} + \dots - 2u + 1$
c_6, c_7, c_{10}	$(u^{20} + u^{19} + \dots + 2u - 1)^2$
c_8	$(u^{20} - u^{19} + \dots + 3u^2 - 1)^2$
c_9	$(u^{20} - u^{19} + \dots + 4u - 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{40} - 21y^{39} + \dots - 1779930400y + 170276401$
c_2, c_3, c_5 c_{11}	$y^{40} + 27y^{39} + \dots + 40y^2 + 1$
c_6, c_7, c_{10}	$(y^{20} + 17y^{19} + \dots - 6y + 1)^2$
c_8	$(y^{20} - 7y^{19} + \dots - 6y + 1)^2$
c_9	$(y^{20} - 11y^{19} + \dots - 6y + 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.274747 + 1.069600I$ $a = -0.650977 - 1.009380I$ $b = 0.31766 + 1.39547I$	$2.02098 - 2.13456I$	$4.50898 + 2.16962I$
$u = 0.274747 + 1.069600I$ $a = -0.084213 - 0.753588I$ $b = -0.918130 - 0.259874I$	$2.02098 - 2.13456I$	$4.50898 + 2.16962I$
$u = 0.274747 - 1.069600I$ $a = -0.650977 + 1.009380I$ $b = 0.31766 - 1.39547I$	$2.02098 + 2.13456I$	$4.50898 - 2.16962I$
$u = 0.274747 - 1.069600I$ $a = -0.084213 + 0.753588I$ $b = -0.918130 + 0.259874I$	$2.02098 + 2.13456I$	$4.50898 - 2.16962I$
$u = 0.773104 + 0.153161I$ $a = 0.829907 - 0.370587I$ $b = -1.084140 + 0.080482I$	$4.77271 + 6.07240I$	$7.45285 - 5.87540I$
$u = 0.773104 + 0.153161I$ $a = 0.37153 + 2.57431I$ $b = 0.49433 - 1.41099I$	$4.77271 + 6.07240I$	$7.45285 - 5.87540I$
$u = 0.773104 - 0.153161I$ $a = 0.829907 + 0.370587I$ $b = -1.084140 - 0.080482I$	$4.77271 - 6.07240I$	$7.45285 + 5.87540I$
$u = 0.773104 - 0.153161I$ $a = 0.37153 - 2.57431I$ $b = 0.49433 + 1.41099I$	$4.77271 - 6.07240I$	$7.45285 + 5.87540I$
$u = 0.772326$ $a = 0.10498 + 2.42938I$ $b = -0.56866 - 1.40361I$	8.84775	12.4400
$u = 0.772326$ $a = 0.10498 - 2.42938I$ $b = -0.56866 + 1.40361I$	8.84775	12.4400

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.198534 + 1.239650I$ $a = 1.83297 - 0.91329I$ $b = 0.199750 - 0.784968I$	$0.52569 - 2.16136I$	$0.73748 + 3.31855I$
$u = -0.198534 + 1.239650I$ $a = 0.01849 - 2.83921I$ $b = 0.053071 + 1.161370I$	$0.52569 - 2.16136I$	$0.73748 + 3.31855I$
$u = -0.198534 - 1.239650I$ $a = 1.83297 + 0.91329I$ $b = 0.199750 + 0.784968I$	$0.52569 + 2.16136I$	$0.73748 - 3.31855I$
$u = -0.198534 - 1.239650I$ $a = 0.01849 + 2.83921I$ $b = 0.053071 - 1.161370I$	$0.52569 + 2.16136I$	$0.73748 - 3.31855I$
$u = -0.692333 + 0.156175I$ $a = 0.333781 + 0.644615I$ $b = 0.162072 + 0.252940I$	$3.61438 - 0.81573I$	$5.67172 + 1.07888I$
$u = -0.692333 + 0.156175I$ $a = -1.37017 + 2.40156I$ $b = -0.049861 - 1.112720I$	$3.61438 - 0.81573I$	$5.67172 + 1.07888I$
$u = -0.692333 - 0.156175I$ $a = 0.333781 - 0.644615I$ $b = 0.162072 - 0.252940I$	$3.61438 + 0.81573I$	$5.67172 - 1.07888I$
$u = -0.692333 - 0.156175I$ $a = -1.37017 - 2.40156I$ $b = -0.049861 + 1.112720I$	$3.61438 + 0.81573I$	$5.67172 - 1.07888I$
$u = 0.327541 + 1.260030I$ $a = 0.653810 + 0.673934I$ $b = -0.46464 - 1.49110I$	$4.94645 + 3.96853I$	$7.89349 - 3.79787I$
$u = 0.327541 + 1.260030I$ $a = -1.51060 - 1.23935I$ $b = -0.67909 + 1.31567I$	$4.94645 + 3.96853I$	$7.89349 - 3.79787I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.327541 - 1.260030I$ $a = 0.653810 - 0.673934I$ $b = -0.46464 + 1.49110I$	$4.94645 - 3.96853I$	$7.89349 + 3.79787I$
$u = 0.327541 - 1.260030I$ $a = -1.51060 + 1.23935I$ $b = -0.67909 - 1.31567I$	$4.94645 - 3.96853I$	$7.89349 + 3.79787I$
$u = -0.201509 + 0.663357I$ $a = -0.408683 - 0.835639I$ $b = -0.502025 - 0.160176I$	$1.62333 - 2.35832I$	$2.35225 + 4.49783I$
$u = -0.201509 + 0.663357I$ $a = 0.005727 - 0.731461I$ $b = 0.195325 + 1.163080I$	$1.62333 - 2.35832I$	$2.35225 + 4.49783I$
$u = -0.201509 - 0.663357I$ $a = -0.408683 + 0.835639I$ $b = -0.502025 + 0.160176I$	$1.62333 + 2.35832I$	$2.35225 - 4.49783I$
$u = -0.201509 - 0.663357I$ $a = 0.005727 + 0.731461I$ $b = 0.195325 - 1.163080I$	$1.62333 + 2.35832I$	$2.35225 - 4.49783I$
$u = -0.295567 + 1.352050I$ $a = 0.356054 + 0.330760I$ $b = 0.392505 + 0.067994I$	$-1.14075 - 4.43308I$	$0.68370 + 2.52728I$
$u = -0.295567 + 1.352050I$ $a = -1.53457 + 1.07334I$ $b = -0.177275 - 1.088720I$	$-1.14075 - 4.43308I$	$0.68370 + 2.52728I$
$u = -0.295567 - 1.352050I$ $a = 0.356054 - 0.330760I$ $b = 0.392505 - 0.067994I$	$-1.14075 + 4.43308I$	$0.68370 - 2.52728I$
$u = -0.295567 - 1.352050I$ $a = -1.53457 - 1.07334I$ $b = -0.177275 + 1.088720I$	$-1.14075 + 4.43308I$	$0.68370 - 2.52728I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.328206 + 1.357610I$ $a = -0.283063 - 0.801762I$ $b = -1.159930 - 0.023595I$	$0.00745 + 10.05770I$	$2.70834 - 7.26612I$
$u = 0.328206 + 1.357610I$ $a = 1.50051 + 1.23763I$ $b = 0.59445 - 1.40555I$	$0.00745 + 10.05770I$	$2.70834 - 7.26612I$
$u = 0.328206 - 1.357610I$ $a = -0.283063 + 0.801762I$ $b = -1.159930 + 0.023595I$	$0.00745 - 10.05770I$	$2.70834 + 7.26612I$
$u = 0.328206 - 1.357610I$ $a = 1.50051 - 1.23763I$ $b = 0.59445 + 1.40555I$	$0.00745 - 10.05770I$	$2.70834 + 7.26612I$
$u = -0.022410 + 1.403750I$ $a = -0.788895 - 0.405125I$ $b = -0.676901 + 0.349305I$	$-4.68486 - 2.84648I$	$-1.60998 + 2.97861I$
$u = -0.022410 + 1.403750I$ $a = 0.387309 + 0.213744I$ $b = 0.495392 + 0.955288I$	$-4.68486 - 2.84648I$	$-1.60998 + 2.97861I$
$u = -0.022410 - 1.403750I$ $a = -0.788895 + 0.405125I$ $b = -0.676901 - 0.349305I$	$-4.68486 + 2.84648I$	$-1.60998 - 2.97861I$
$u = -0.022410 - 1.403750I$ $a = 0.387309 - 0.213744I$ $b = 0.495392 - 0.955288I$	$-4.68486 + 2.84648I$	$-1.60998 - 2.97861I$
$u = -0.358818$ $a = -4.26389 + 1.88679I$ $b = -0.123906 + 1.022770I$	3.97005	10.7620
$u = -0.358818$ $a = -4.26389 - 1.88679I$ $b = -0.123906 - 1.022770I$	3.97005	10.7620

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

(i) Arc colorings

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

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

$$a_2 = \begin{pmatrix} u^2 + u + \frac{3}{2} \\ -1 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} u^2 + u + \frac{5}{2} \\ -1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 2u^2 + 2u + 4 \\ -2 \end{pmatrix}$$

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

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

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

$$a_9 = \begin{pmatrix} u^2 + 1 \\ -u^2 - u - 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + u + 2 \\ \frac{1}{2}u - 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^2 + u + 2 \\ \frac{1}{2}u - 1 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $\frac{1}{4}u - 2$

(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
c_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}	$y^3 + 3y^2 + 2y - 1$
c_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
$u = -0.215080 + 1.307140I$ $a = -0.377439 + 0.744862I$ $b = -1.00000$	$-4.66906 - 2.82812I$	$-2.05377 + 0.32679I$
$u = -0.215080 - 1.307140I$ $a = -0.377439 - 0.744862I$ $b = -1.00000$	$-4.66906 + 2.82812I$	$-2.05377 - 0.32679I$
$u = -0.569840$ $a = 1.25488$ $b = -1.00000$	-0.531480	-2.14250

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$64(8u^3 + 4u^2 - 1)(8u^{24} - 12u^{23} + \dots - u + 1)$ $\cdot (u^{40} - 3u^{39} + \dots - 60100u + 13049)$
c_2, c_{11}	$((u - 1)^3)(u^{24} + 3u^{23} + \dots + 6u - 1)(u^{40} - 7u^{39} + \dots - 2u + 1)$
c_3, c_5	$((u + 1)^3)(u^{24} + 3u^{23} + \dots + 6u - 1)(u^{40} - 7u^{39} + \dots - 2u + 1)$
c_4	$64(8u^3 - 4u^2 + 1)(8u^{24} - 12u^{23} + \dots - u + 1)$ $\cdot (u^{40} - 3u^{39} + \dots - 60100u + 13049)$
c_6, c_7	$(u^3 + u^2 + 2u + 1)(u^{20} + u^{19} + \dots + 2u - 1)^2$ $\cdot (u^{24} + 10u^{22} + \dots - 15u - 4)$
c_8	$u^3(u^{20} - u^{19} + \dots + 3u^2 - 1)^2(u^{24} + 3u^{23} + \dots + 224u + 128)$
c_9	$(u^3 + u^2 - 1)(u^{20} - u^{19} + \dots + 4u - 1)^2$ $\cdot (u^{24} - 6u^{22} + \dots - 1079u - 676)$
c_{10}	$(u^3 - u^2 + 2u - 1)(u^{20} + u^{19} + \dots + 2u - 1)^2$ $\cdot (u^{24} + 10u^{22} + \dots - 15u - 4)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$4096(64y^3 - 16y^2 + 8y - 1)(64y^{24} - 656y^{23} + \dots - 7y + 1)$ $\cdot (y^{40} - 21y^{39} + \dots - 1779930400y + 170276401)$
c_2, c_3, c_5 c_{11}	$((y - 1)^3)(y^{24} + 13y^{23} + \dots - 38y + 1)(y^{40} + 27y^{39} + \dots + 40y^2 + 1)$
c_6, c_7, c_{10}	$(y^3 + 3y^2 + 2y - 1)(y^{20} + 17y^{19} + \dots - 6y + 1)^2$ $\cdot (y^{24} + 20y^{23} + \dots - 97y + 16)$
c_8	$y^3(y^{20} - 7y^{19} + \dots - 6y + 1)^2(y^{24} - 7y^{23} + \dots - 226304y + 16384)$
c_9	$(y^3 - y^2 + 2y - 1)(y^{20} - 11y^{19} + \dots - 6y + 1)^2$ $\cdot (y^{24} - 12y^{23} + \dots - 1380561y + 456976)$