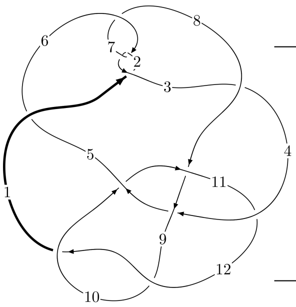
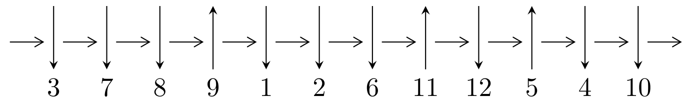
$12a_{0527}$ ($K12a_{0527}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -2.62656\times 10^{32}u^{100} - 1.37621\times 10^{32}u^{99} + \cdots + 1.43355\times 10^{32}b - 4.87406\times 10^{32},$$
$$7.89761\times 10^{32}u^{100} - 1.36318\times 10^{33}u^{99} + \cdots + 1.43355\times 10^{32}a + 6.41450\times 10^{32},\ u^{101} - 2u^{100} + \cdots - 3u -$$
$$I_2^u = \langle b + u - 1,\ -u^2 + a + u,\ u^3 - u^2 + 1\rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 104 representations.

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[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. $\boldsymbol{I^u_1 = \langle -2.63 \times 10^{32} u^{100} - 1.38 \times 10^{32} u^{99} + \cdots + 1.43 \times 10^{32} b - 4.87 \times 10^{32},\ 7.90 \times 10^{32} u^{100} - 1.36 \times 10^{33} u^{99} + \cdots + 1.43 \times 10^{32} a + 6.41 \times 10^{32},\ u^{101} - 2u^{100} + \cdots - 3u - 1 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^7 - 2u^5 + 2u^3 - 2u \\ -u^7 + u^5 - 2u^3 + u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -5.50914u^{100} + 9.50914u^{99} + \cdots - 11.1589u - 4.47457 \\ 1.83221u^{100} + 0.960001u^{99} + \cdots + 8.36542u + 3.40000 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1.84477u^{100} - 2.24477u^{99} + \cdots + 5.88323u + 0.722386 \\ -0.602902u^{100} + 0.200001u^{99} + \cdots - 0.0776162u - 0.400001 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^3 \\ u^5 - u^3 + u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u^8 + u^6 - u^4 + 1 \\ -u^{10} + 2u^8 - 3u^6 + 2u^4 - u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -4.64586u^{100} + 6.04586u^{99} + \cdots - 15.4372u - 6.42293 \\ 0.439796u^{100} + 2.56000u^{99} + \cdots + 8.01707u + 3.60000 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -4.18435u^{100} + 5.38435u^{99} + \cdots - 13.0030u - 6.29217 \\ 0.241103u^{100} + 2.56000u^{99} + \cdots + 8.34783u + 3.40000 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -31.9407u^{100} + 84.2414u^{99} + \cdots + 10.3636u + 24.0193$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7	$u^{101} + 36u^{100} + \cdots + u + 1$
c_2, c_6	$u^{101} - 2u^{100} + \cdots - 3u - 1$
c_3, c_5	$u^{101} + 2u^{100} + \cdots - 31477u - 8353$
c_4	$u^{101} - 2u^{100} + \cdots + u - 1$
c_8	$u^{101} + 17u^{100} + \cdots + 4u - 8$
c_9, c_{12}	$u^{101} - 4u^{100} + \cdots - 2u - 1$
c_{10}	$u^{101} - u^{100} + \cdots - 2263262u - 275501$
c_{11}	$u^{101} + u^{100} + \cdots - 9608u - 3329$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7	$y^{101} + 60y^{100} + \cdots - 215y - 1$
c_2, c_6	$y^{101} - 36y^{100} + \cdots + y - 1$
c_3, c_5	$y^{101} - 84y^{100} + \cdots + 315879129y - 69772609$
c_4	$y^{101} + 20y^{100} + \cdots + y - 1$
c_8	$y^{101} + 21y^{100} + \cdots + 80y - 64$
c_9, c_{12}	$y^{101} - 78y^{100} + \cdots + 142y - 1$
c_{10}	$y^{101} - 53y^{100} + \cdots - 5937265797024y - 75900801001$
c_{11}	$y^{101} - 129y^{100} + \cdots + 336808740y - 11082241$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.580578 + 0.817482I$ $a = 1.08176 + 2.75518I$ $b = -1.61602 - 1.97604I$	$-6.13347 + 12.43020I$	0
$u = 0.580578 - 0.817482I$ $a = 1.08176 - 2.75518I$ $b = -1.61602 + 1.97604I$	$-6.13347 - 12.43020I$	0
$u = -0.776866 + 0.636255I$ $a = -1.285090 - 0.032532I$ $b = -0.235532 + 0.454753I$	$-0.351074 - 0.411440I$	0
$u = -0.776866 - 0.636255I$ $a = -1.285090 + 0.032532I$ $b = -0.235532 - 0.454753I$	$-0.351074 + 0.411440I$	0
$u = -0.579941 + 0.831261I$ $a = -0.20262 + 1.51768I$ $b = 0.491882 - 1.239610I$	$-5.31423 - 4.01863I$	0
$u = -0.579941 - 0.831261I$ $a = -0.20262 - 1.51768I$ $b = 0.491882 + 1.239610I$	$-5.31423 + 4.01863I$	0
$u = 0.731897 + 0.717631I$ $a = -0.985525 - 0.373921I$ $b = 1.232150 + 0.021103I$	$3.54399 - 0.83039I$	0
$u = 0.731897 - 0.717631I$ $a = -0.985525 + 0.373921I$ $b = 1.232150 - 0.021103I$	$3.54399 + 0.83039I$	0
$u = 0.579045 + 0.782616I$ $a = -1.41006 - 2.92308I$ $b = 1.80130 + 2.00177I$	$-1.15835 + 6.39204I$	0
$u = 0.579045 - 0.782616I$ $a = -1.41006 + 2.92308I$ $b = 1.80130 - 2.00177I$	$-1.15835 - 6.39204I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.992696 + 0.288852I$ $a = -0.413171 - 1.163250I$ $b = 0.357560 - 0.746316I$	$-5.66355 - 7.67808I$	0
$u = 0.992696 - 0.288852I$ $a = -0.413171 + 1.163250I$ $b = 0.357560 + 0.746316I$	$-5.66355 + 7.67808I$	0
$u = -0.586808 + 0.759798I$ $a = 0.04149 - 2.11805I$ $b = -0.78617 + 1.40337I$	$-1.12071 - 2.11881I$	0
$u = -0.586808 - 0.759798I$ $a = 0.04149 + 2.11805I$ $b = -0.78617 - 1.40337I$	$-1.12071 + 2.11881I$	0
$u = 0.551923 + 0.766712I$ $a = 1.00983 - 2.09875I$ $b = -0.93227 + 1.55605I$	$-5.52348 + 3.44945I$	0
$u = 0.551923 - 0.766712I$ $a = 1.00983 + 2.09875I$ $b = -0.93227 - 1.55605I$	$-5.52348 - 3.44945I$	0
$u = -0.999347 + 0.340848I$ $a = 1.060780 - 0.155870I$ $b = 0.171910 - 0.581163I$	$-5.38574 - 1.49082I$	0
$u = -0.999347 - 0.340848I$ $a = 1.060780 + 0.155870I$ $b = 0.171910 + 0.581163I$	$-5.38574 + 1.49082I$	0
$u = -0.867440 + 0.602442I$ $a = -1.027350 - 0.522687I$ $b = -0.41382 + 1.88947I$	$-2.06528 + 2.36638I$	0
$u = -0.867440 - 0.602442I$ $a = -1.027350 + 0.522687I$ $b = -0.41382 - 1.88947I$	$-2.06528 - 2.36638I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.830410 + 0.659590I$ $a = 3.26701 + 2.72075I$ $b = -3.24052 + 0.35453I$	$0.66876 - 2.15524I$	0
$u = 0.830410 - 0.659590I$ $a = 3.26701 - 2.72075I$ $b = -3.24052 - 0.35453I$	$0.66876 + 2.15524I$	0
$u = -0.790678 + 0.720657I$ $a = 0.373565 + 0.794306I$ $b = 0.26102 - 1.55215I$	$4.26660 - 1.41032I$	0
$u = -0.790678 - 0.720657I$ $a = 0.373565 - 0.794306I$ $b = 0.26102 + 1.55215I$	$4.26660 + 1.41032I$	0
$u = -0.557322 + 0.741721I$ $a = 2.71247 + 1.31477I$ $b = -0.38069 - 1.74543I$	$-3.15042 - 1.23136I$	0
$u = -0.557322 - 0.741721I$ $a = 2.71247 - 1.31477I$ $b = -0.38069 + 1.74543I$	$-3.15042 + 1.23136I$	0
$u = 0.527722 + 0.745991I$ $a = 1.97089 + 2.02020I$ $b = -2.00746 - 1.35637I$	$-5.69818 - 0.73271I$	0
$u = 0.527722 - 0.745991I$ $a = 1.97089 - 2.02020I$ $b = -2.00746 + 1.35637I$	$-5.69818 + 0.73271I$	0
$u = -0.760571 + 0.777702I$ $a = -0.226258 - 1.040140I$ $b = -0.33988 + 1.47739I$	$0.92908 - 6.20119I$	0
$u = -0.760571 - 0.777702I$ $a = -0.226258 + 1.040140I$ $b = -0.33988 - 1.47739I$	$0.92908 + 6.20119I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.875040 + 0.660065I$ $a = -3.59751 - 2.74451I$ $b = 3.84044 - 0.34482I$	$0.53070 - 2.96586I$	0
$u = 0.875040 - 0.660065I$ $a = -3.59751 + 2.74451I$ $b = 3.84044 + 0.34482I$	$0.53070 + 2.96586I$	0
$u = 1.100210 + 0.020604I$ $a = 0.236817 - 0.239066I$ $b = -0.54000 - 1.67484I$	$-6.80779 - 1.09810I$	0
$u = 1.100210 - 0.020604I$ $a = 0.236817 + 0.239066I$ $b = -0.54000 + 1.67484I$	$-6.80779 + 1.09810I$	0
$u = 0.860089 + 0.697567I$ $a = -0.717370 + 0.810706I$ $b = -0.208718 - 1.143530I$	$2.62589 - 2.67725I$	0
$u = 0.860089 - 0.697567I$ $a = -0.717370 - 0.810706I$ $b = -0.208718 + 1.143530I$	$2.62589 + 2.67725I$	0
$u = 1.10810$ $a = -0.856082$ $b = 2.03030$	-8.68154	0
$u = -0.887567$ $a = -0.817633$ $b = -0.550192$	-1.33224	0
$u = -1.114620 + 0.030825I$ $a = -0.469459 - 0.747816I$ $b = -0.73619 - 2.63460I$	$-7.02899 + 5.28777I$	0
$u = -1.114620 - 0.030825I$ $a = -0.469459 + 0.747816I$ $b = -0.73619 + 2.63460I$	$-7.02899 - 5.28777I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.542066 + 0.695535I$ $a = -1.50995 + 1.17691I$ $b = \quad 0.723518 - 0.216829I$	$-1.55569 - 0.20530I$	0
$u = -0.542066 - 0.695535I$ $a = -1.50995 - 1.17691I$ $b = \quad 0.723518 + 0.216829I$	$-1.55569 + 0.20530I$	0
$u = -0.912004 + 0.648971I$ $a = \quad 0.699393 - 0.327027I$ $b = -0.040908 + 0.524679I$	$-0.76674 + 5.44373I$	0
$u = -0.912004 - 0.648971I$ $a = \quad 0.699393 + 0.327027I$ $b = -0.040908 - 0.524679I$	$-0.76674 - 5.44373I$	0
$u = -1.120330 + 0.009077I$ $a = \quad 0.939852 - 0.584975I$ $b = \quad 1.47923 - 1.99943I$	$-11.22580 + 2.15574I$	0
$u = -1.120330 - 0.009077I$ $a = \quad 0.939852 + 0.584975I$ $b = \quad 1.47923 + 1.99943I$	$-11.22580 - 2.15574I$	0
$u = -0.407323 + 0.766016I$ $a = \quad 0.586665 - 1.063980I$ $b = -0.206688 + 0.784276I$	$-6.31216 + 0.71745I$	0
$u = -0.407323 - 0.766016I$ $a = \quad 0.586665 + 1.063980I$ $b = -0.206688 - 0.784276I$	$-6.31216 - 0.71745I$	0
$u = \quad 0.809595 + 0.792585I$ $a = \quad 0.268089 + 0.189950I$ $b = -0.679333 - 0.007535I$	$1.70257 - 3.61317I$	0
$u = \quad 0.809595 - 0.792585I$ $a = \quad 0.268089 - 0.189950I$ $b = -0.679333 + 0.007535I$	$1.70257 + 3.61317I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.429106 + 0.750232I$ $a = -0.27237 - 2.16240I$ $b = -0.193102 + 1.257930I$	$-7.02341 - 9.31002I$	0
$u = 0.429106 - 0.750232I$ $a = -0.27237 + 2.16240I$ $b = -0.193102 - 1.257930I$	$-7.02341 + 9.31002I$	0
$u = 0.492476 + 0.706817I$ $a = 0.10857 + 2.62980I$ $b = 0.07012 - 1.55469I$	$-1.76205 - 3.73837I$	0
$u = 0.492476 - 0.706817I$ $a = 0.10857 - 2.62980I$ $b = 0.07012 + 1.55469I$	$-1.76205 + 3.73837I$	0
$u = -1.137550 + 0.052552I$ $a = 0.399378 + 0.529597I$ $b = 0.51656 + 2.35138I$	$-12.3236 + 11.2549I$	0
$u = -1.137550 - 0.052552I$ $a = 0.399378 - 0.529597I$ $b = 0.51656 - 2.35138I$	$-12.3236 - 11.2549I$	0
$u = 1.146290 + 0.059871I$ $a = -0.033176 + 0.392153I$ $b = 0.12752 + 1.41665I$	$-11.62260 - 2.80284I$	0
$u = 1.146290 - 0.059871I$ $a = -0.033176 - 0.392153I$ $b = 0.12752 - 1.41665I$	$-11.62260 + 2.80284I$	0
$u = 0.808462 + 0.265214I$ $a = 0.18244 + 1.90764I$ $b = -0.264215 + 0.137536I$	$-0.97574 - 3.59051I$	0
$u = 0.808462 - 0.265214I$ $a = 0.18244 - 1.90764I$ $b = -0.264215 - 0.137536I$	$-0.97574 + 3.59051I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.914022 + 0.701626I$ $a = 1.34539 + 0.51557I$ $b = 0.26129 - 1.58824I$	$3.89278 + 6.84476I$	0
$u = -0.914022 - 0.701626I$ $a = 1.34539 - 0.51557I$ $b = 0.26129 + 1.58824I$	$3.89278 - 6.84476I$	0
$u = 0.957278 + 0.683503I$ $a = 0.765723 + 1.038360I$ $b = -1.087560 + 0.318468I$	$2.86234 - 4.54345I$	0
$u = 0.957278 - 0.683503I$ $a = 0.765723 - 1.038360I$ $b = -1.087560 - 0.318468I$	$2.86234 + 4.54345I$	0
$u = 0.813595 + 0.080576I$ $a = 1.40060 + 1.21033I$ $b = -0.749481 + 0.170542I$	$-4.44148 - 1.57004I$	$-18.1875 + 4.5005I$
$u = 0.813595 - 0.080576I$ $a = 1.40060 - 1.21033I$ $b = -0.749481 - 0.170542I$	$-4.44148 + 1.57004I$	$-18.1875 - 4.5005I$
$u = -0.950666 + 0.730111I$ $a = -1.43170 - 0.53854I$ $b = -0.04381 + 1.56263I$	$0.35283 + 11.88910I$	0
$u = -0.950666 - 0.730111I$ $a = -1.43170 + 0.53854I$ $b = -0.04381 - 1.56263I$	$0.35283 - 11.88910I$	0
$u = 0.929268 + 0.766181I$ $a = -0.141246 - 0.414026I$ $b = 0.514331 - 0.104628I$	$1.34446 - 2.23765I$	0
$u = 0.929268 - 0.766181I$ $a = -0.141246 + 0.414026I$ $b = 0.514331 + 0.104628I$	$1.34446 + 2.23765I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.029130 + 0.641441I$ $a = 1.81274 - 0.76025I$ $b = -1.55235 - 0.42125I$	$-2.93373 + 5.37990I$	0
$u = -1.029130 - 0.641441I$ $a = 1.81274 + 0.76025I$ $b = -1.55235 + 0.42125I$	$-2.93373 - 5.37990I$	0
$u = 1.037880 + 0.629632I$ $a = -2.73972 + 1.12561I$ $b = 0.50709 - 2.03495I$	$-3.28431 - 1.38267I$	0
$u = 1.037880 - 0.629632I$ $a = -2.73972 - 1.12561I$ $b = 0.50709 + 2.03495I$	$-3.28431 + 1.38267I$	0
$u = 1.060120 + 0.607138I$ $a = 2.21827 - 0.75718I$ $b = -0.52025 + 1.44085I$	$-8.83256 + 4.21940I$	0
$u = 1.060120 - 0.607138I$ $a = 2.21827 + 0.75718I$ $b = -0.52025 - 1.44085I$	$-8.83256 - 4.21940I$	0
$u = -1.067440 + 0.598297I$ $a = -1.45738 + 0.17148I$ $b = 0.649022 + 0.760713I$	$-8.22594 + 4.35979I$	0
$u = -1.067440 - 0.598297I$ $a = -1.45738 - 0.17148I$ $b = 0.649022 - 0.760713I$	$-8.22594 - 4.35979I$	0
$u = -1.038260 + 0.654379I$ $a = 0.30062 + 2.25294I$ $b = 1.34619 - 2.47686I$	$-4.54784 + 6.56119I$	0
$u = -1.038260 - 0.654379I$ $a = 0.30062 - 2.25294I$ $b = 1.34619 + 2.47686I$	$-4.54784 - 6.56119I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.045550 + 0.646235I$ $a = -2.89155 - 1.48305I$ $b = 2.36845 - 1.69914I$	$-7.19366 - 4.56403I$	0
$u = 1.045550 - 0.646235I$ $a = -2.89155 + 1.48305I$ $b = 2.36845 + 1.69914I$	$-7.19366 + 4.56403I$	0
$u = -1.035690 + 0.667806I$ $a = -2.13484 - 0.55959I$ $b = 0.89394 + 2.02131I$	$-2.44358 + 7.54869I$	0
$u = -1.035690 - 0.667806I$ $a = -2.13484 + 0.55959I$ $b = 0.89394 - 2.02131I$	$-2.44358 - 7.54869I$	0
$u = 1.047060 + 0.658682I$ $a = 1.75328 - 2.16511I$ $b = 0.74251 + 1.80776I$	$-6.97481 - 8.85240I$	0
$u = 1.047060 - 0.658682I$ $a = 1.75328 + 2.16511I$ $b = 0.74251 - 1.80776I$	$-6.97481 + 8.85240I$	0
$u = 1.044850 + 0.671965I$ $a = 3.55264 + 0.42446I$ $b = -2.08041 + 2.51692I$	$-2.53914 - 11.89080I$	0
$u = 1.044850 - 0.671965I$ $a = 3.55264 - 0.42446I$ $b = -2.08041 - 2.51692I$	$-2.53914 + 11.89080I$	0
$u = 1.056520 + 0.683688I$ $a = -3.19914 - 0.15526I$ $b = 1.81789 - 2.46625I$	$-7.5601 - 18.0608I$	0
$u = 1.056520 - 0.683688I$ $a = -3.19914 + 0.15526I$ $b = 1.81789 + 2.46625I$	$-7.5601 + 18.0608I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.061860+0.687387I$ $a=\ 1.72915+0.32383I$ $b=-0.61511-1.49865I$	$-6.76591+9.69838I$	0
$u=-1.061860-0.687387I$ $a=\ 1.72915-0.32383I$ $b=-0.61511+1.49865I$	$-6.76591-9.69838I$	0
$u=-0.687052+0.171908I$ $a=-1.022670+0.527605I$ $b=-0.379193+0.262286I$	$-1.146000+0.219134I$	$-10.05783-1.01720I$
$u=-0.687052-0.171908I$ $a=-1.022670-0.527605I$ $b=-0.379193-0.262286I$	$-1.146000-0.219134I$	$-10.05783+1.01720I$
$u=-0.664651$ $a=\ 3.78562$ $b=\ 3.39066$	-2.63642	76.6880
$u=-0.040952+0.625167I$ $a=\ 0.128896+0.458554I$ $b=-0.480942-0.715993I$	$-2.53232+4.74598I$	$-7.25373-5.98906I$
$u=-0.040952-0.625167I$ $a=\ 0.128896-0.458554I$ $b=-0.480942+0.715993I$	$-2.53232-4.74598I$	$-7.25373+5.98906I$
$u=\ 0.052208+0.417362I$ $a=-0.570587+0.222928I$ $b=\ 0.641330+0.478339I$	$1.08223+1.37708I$	$0.60455-2.47173I$
$u=\ 0.052208-0.417362I$ $a=-0.570587-0.222928I$ $b=\ 0.641330-0.478339I$	$1.08223-1.37708I$	$0.60455+2.47173I$
$u=-0.159875+0.226427I$ $a=-3.26352-1.45574I$ $b=-0.420029+0.724916I$	$-1.93515+0.71126I$	$-4.76387+0.88702I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.159875-0.226427I$		
$a=-3.26352+1.45574I$	$-1.93515-0.71126I$	$-4.76387-0.88702I$
$b=-0.420029-0.724916I$		

II. $I_2^u = \langle b+u-1,\ -u^2+a+u,\ u^3-u^2+1\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u \\ -u^2+u+1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2+1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^2-u \\ -u+1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^2+1 \\ u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^2-1 \\ -u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u \\ -u^2+u+1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u^2-u+1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} u^2-1 \\ -u+1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^2+8u-16$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_4	$u^3 - u^2 + 2u - 1$
c_2	$u^3 + u^2 - 1$
c_5, c_7	$u^3 + u^2 + 2u + 1$
c_6	$u^3 - u^2 + 1$
c_8	u^3
c_9	$(u - 1)^3$
c_{10}, c_{11}	$u^3 + 2u^2 + u + 1$
c_{12}	$(u + 1)^3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4 c_5, c_7	$y^3 + 3y^2 + 2y - 1$
c_2, c_6	$y^3 - y^2 + 2y - 1$
c_8	y^3
c_9, c_{12}	$(y-1)^3$
c_{10}, c_{11}	$y^3 - 2y^2 - 3y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$ $a = -0.662359 + 0.562280I$ $b = 0.122561 - 0.744862I$	$1.37919 - 2.82812I$	$-9.19557 + 4.65175I$
$u = 0.877439 - 0.744862I$ $a = -0.662359 - 0.562280I$ $b = 0.122561 + 0.744862I$	$1.37919 + 2.82812I$	$-9.19557 - 4.65175I$
$u = -0.754878$ $a = 1.32472$ $b = 1.75488$	-2.75839	-22.6090

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^3-u^2+2u-1)(u^{101}+36u^{100}+\cdots+u+1)$
c_2	$(u^3+u^2-1)(u^{101}-2u^{100}+\cdots-3u-1)$
c_3	$(u^3-u^2+2u-1)(u^{101}+2u^{100}+\cdots-31477u-8353)$
c_4	$(u^3-u^2+2u-1)(u^{101}-2u^{100}+\cdots+u-1)$
c_5	$(u^3+u^2+2u+1)(u^{101}+2u^{100}+\cdots-31477u-8353)$
c_6	$(u^3-u^2+1)(u^{101}-2u^{100}+\cdots-3u-1)$
c_7	$(u^3+u^2+2u+1)(u^{101}+36u^{100}+\cdots+u+1)$
c_8	$u^3(u^{101}+17u^{100}+\cdots+4u-8)$
c_9	$((u-1)^3)(u^{101}-4u^{100}+\cdots-2u-1)$
c_{10}	$(u^3+2u^2+u+1)(u^{101}-u^{100}+\cdots-2263262u-275501)$
c_{11}	$(u^3+2u^2+u+1)(u^{101}+u^{100}+\cdots-9608u-3329)$
c_{12}	$((u+1)^3)(u^{101}-4u^{100}+\cdots-2u-1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7	$(y^3+3y^2+2y-1)(y^{101}+60y^{100}+\cdots-215y-1)$
c_2, c_6	$(y^3-y^2+2y-1)(y^{101}-36y^{100}+\cdots+y-1)$
c_3, c_5	$(y^3+3y^2+2y-1)(y^{101}-84y^{100}+\cdots+3.15879\times10^8y-6.97726\times10^7)$
c_4	$(y^3+3y^2+2y-1)(y^{101}+20y^{100}+\cdots+y-1)$
c_8	$y^3(y^{101}+21y^{100}+\cdots+80y-64)$
c_9, c_{12}	$((y-1)^3)(y^{101}-78y^{100}+\cdots+142y-1)$
c_{10}	(y^3-2y^2-3y-1) $\cdot\,(y^{101}-53y^{100}+\cdots-5937265797024y-75900801001)$
c_{11}	$(y^3-2y^2-3y-1)(y^{101}-129y^{100}+\cdots+3.36809\times10^8y-1.10822\times10^7)$