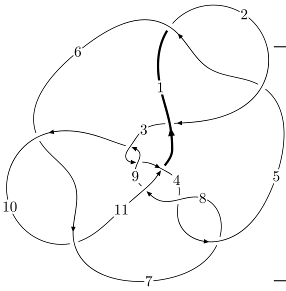
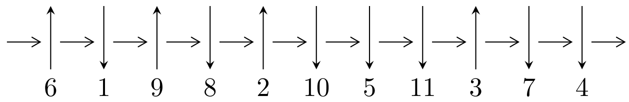
$11a_{172}$ ($K11a_{172}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -2.51962 \times 10^{120} u^{80} + 2.58128 \times 10^{120} u^{79} + \cdots + 2.77111 \times 10^{119} b + 2.51695 \times 10^{121}, \\ & 1.23775 \times 10^{121} u^{80} + 2.60882 \times 10^{121} u^{79} + \cdots + 3.04822 \times 10^{120} a + 3.89021 \times 10^{122}, \\ & u^{81} - u^{80} + \cdots + 146u + 11 \rangle \\ I_2^u = \langle & u^{10} + 2u^9 + 5u^8 + 6u^7 + 10u^6 + 9u^5 + 12u^4 + 5u^3 + 8u^2 + b + u + 3, \\ & 3u^{10} + 5u^9 + 12u^8 + 12u^7 + 21u^6 + 15u^5 + 24u^4 + 5u^3 + 16u^2 + a + u + 6, \\ & u^{12} + 2u^{11} + 5u^{10} + 6u^9 + 10u^8 + 9u^7 + 13u^6 + 7u^5 + 10u^4 + 3u^3 + 5u^2 + u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 93 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. $\boldsymbol{I^u_1 = \langle -2.52\times10^{120}u^{80} + 2.58\times10^{120}u^{79} + \cdots + 2.77\times10^{119}b + 2.52\times10^{121},\ 1.24\times10^{121}u^{80} + 2.61\times10^{121}u^{79} + \cdots + 3.05\times10^{120}a + 3.89\times10^{122},\ u^{81} - u^{80} + \cdots + 146u + 11\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -4.06056u^{80} - 8.55851u^{79} + \cdots - 1752.97u - 127.622 \\ 9.09247u^{80} - 9.31497u^{79} + \cdots - 1152.42u - 90.8282 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -1.90149u^{80} - 3.63407u^{79} + \cdots - 542.258u - 30.5284 \\ -3.50405u^{80} + 5.85044u^{79} + \cdots + 895.848u + 67.8095 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1.60256u^{80} - 9.48451u^{79} + \cdots - 1438.11u - 98.3380 \\ -3.50405u^{80} + 5.85044u^{79} + \cdots + 895.848u + 67.8095 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0.693951u^{80} - 4.44401u^{79} + \cdots - 730.986u - 54.7342 \\ 6.50203u^{80} - 8.97698u^{79} + \cdots - 1397.70u - 105.903 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -10.4549u^{80} - 0.552077u^{79} + \cdots - 685.338u - 46.3310 \\ 7.65677u^{80} - 5.80747u^{79} + \cdots - 574.080u - 48.8420 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 7.55435u^{80} + 8.32431u^{79} + \cdots + 1688.10u + 113.742 \\ -2.60153u^{80} + 0.937228u^{79} + \cdots - 22.1822u + 0.491286 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 7.55435u^{80} + 8.32431u^{79} + \cdots + 1688.10u + 113.742 \\ -2.60153u^{80} + 0.937228u^{79} + \cdots - 22.1822u + 0.491286 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 29.9952u^{80} - 20.3906u^{79} + \cdots - 1409.95u - 140.975$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{81} - u^{80} + \cdots + 146u + 11$
c_2	$u^{81} + 37u^{80} + \cdots + 24110u - 121$
c_3, c_9	$u^{81} - u^{80} + \cdots + 4136u + 361$
c_4, c_7	$u^{81} - 4u^{80} + \cdots - 337u + 79$
c_6, c_{10}	$u^{81} + u^{80} + \cdots + 204u + 53$
c_8	$u^{81} - 3u^{80} + \cdots - 19u + 1$
c_{11}	$u^{81} - 6u^{80} + \cdots + 13u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{81} + 37y^{80} + \cdots + 24110y - 121$
c_2	$y^{81} + 21y^{80} + \cdots + 659237638y - 14641$
c_3, c_9	$y^{81} + 51y^{80} + \cdots - 2871244y - 130321$
c_4, c_7	$y^{81} + 46y^{80} + \cdots - 118533y - 6241$
c_6, c_{10}	$y^{81} - 53y^{80} + \cdots - 83040y - 2809$
c_8	$y^{81} - 11y^{80} + \cdots + 39y - 1$
c_{11}	$y^{81} + 8y^{80} + \cdots - 25y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.277742 + 0.957304I$ $a = 0.589284 - 0.040204I$ $b = 1.029450 + 0.799534I$	$-1.28833 - 3.68796I$	0
$u = 0.277742 - 0.957304I$ $a = 0.589284 + 0.040204I$ $b = 1.029450 - 0.799534I$	$-1.28833 + 3.68796I$	0
$u = -0.890636 + 0.426487I$ $a = 0.936841 - 0.482062I$ $b = -1.16295 + 1.37688I$	$1.65327 - 2.04363I$	0
$u = -0.890636 - 0.426487I$ $a = 0.936841 + 0.482062I$ $b = -1.16295 - 1.37688I$	$1.65327 + 2.04363I$	0
$u = 0.914505 + 0.442850I$ $a = -0.722643 - 0.237503I$ $b = 0.985252 + 0.169801I$	$2.79428 + 2.46741I$	0
$u = 0.914505 - 0.442850I$ $a = -0.722643 + 0.237503I$ $b = 0.985252 - 0.169801I$	$2.79428 - 2.46741I$	0
$u = 0.373294 + 0.899163I$ $a = -2.23145 - 1.34143I$ $b = -0.306209 + 0.777908I$	$-6.67065 + 1.54680I$	0
$u = 0.373294 - 0.899163I$ $a = -2.23145 + 1.34143I$ $b = -0.306209 - 0.777908I$	$-6.67065 - 1.54680I$	0
$u = 0.765703 + 0.590162I$ $a = 0.213361 - 0.436707I$ $b = 0.788040 + 0.178633I$	$-3.41372 + 1.66088I$	0
$u = 0.765703 - 0.590162I$ $a = 0.213361 + 0.436707I$ $b = 0.788040 - 0.178633I$	$-3.41372 - 1.66088I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.184870 + 0.945828I$ $a = -2.49698 + 1.69418I$ $b = -1.90605 + 0.40352I$	$-1.21757 + 4.42471I$	0
$u = -0.184870 - 0.945828I$ $a = -2.49698 - 1.69418I$ $b = -1.90605 - 0.40352I$	$-1.21757 - 4.42471I$	0
$u = 0.436642 + 0.944106I$ $a = 3.10641 + 1.33262I$ $b = 2.13162 - 1.48569I$	$-2.27868 + 2.43296I$	0
$u = 0.436642 - 0.944106I$ $a = 3.10641 - 1.33262I$ $b = 2.13162 + 1.48569I$	$-2.27868 - 2.43296I$	0
$u = -0.870540 + 0.396771I$ $a = -0.117573 - 0.343970I$ $b = 1.50328 - 0.19115I$	$-4.70614 + 5.21682I$	0
$u = -0.870540 - 0.396771I$ $a = -0.117573 + 0.343970I$ $b = 1.50328 + 0.19115I$	$-4.70614 - 5.21682I$	0
$u = -0.733303 + 0.744518I$ $a = -0.604651 + 0.227996I$ $b = 0.103799 + 0.288765I$	$5.79269 - 0.02102I$	0
$u = -0.733303 - 0.744518I$ $a = -0.604651 - 0.227996I$ $b = 0.103799 - 0.288765I$	$5.79269 + 0.02102I$	0
$u = -0.295228 + 0.905302I$ $a = 1.88964 - 1.34066I$ $b = 0.975564 - 0.380586I$	$-2.95455 - 1.54554I$	0
$u = -0.295228 - 0.905302I$ $a = 1.88964 + 1.34066I$ $b = 0.975564 + 0.380586I$	$-2.95455 + 1.54554I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.017650 + 0.379794I$ $a = 0.349039 - 0.014629I$ $b = -1.58864 - 0.88981I$	$-0.44931 - 11.14580I$	0
$u = 1.017650 - 0.379794I$ $a = 0.349039 + 0.014629I$ $b = -1.58864 + 0.88981I$	$-0.44931 + 11.14580I$	0
$u = -0.748260 + 0.498352I$ $a = -0.680709 - 0.033153I$ $b = 1.36977 - 1.10869I$	$3.41784 + 5.58312I$	0
$u = -0.748260 - 0.498352I$ $a = -0.680709 + 0.033153I$ $b = 1.36977 + 1.10869I$	$3.41784 - 5.58312I$	0
$u = 0.530048 + 0.969062I$ $a = 1.02205 + 2.36180I$ $b = 2.14085 + 0.68040I$	$-1.64510 + 2.76495I$	0
$u = 0.530048 - 0.969062I$ $a = 1.02205 - 2.36180I$ $b = 2.14085 - 0.68040I$	$-1.64510 - 2.76495I$	0
$u = -0.379563 + 1.038440I$ $a = 0.019259 - 0.353203I$ $b = -0.290543 + 0.509795I$	$-3.68236 - 0.74433I$	0
$u = -0.379563 - 1.038440I$ $a = 0.019259 + 0.353203I$ $b = -0.290543 - 0.509795I$	$-3.68236 + 0.74433I$	0
$u = 0.322947 + 1.065460I$ $a = -2.38819 - 0.46170I$ $b = -1.74404 + 0.51029I$	$-1.71311 + 5.50527I$	0
$u = 0.322947 - 1.065460I$ $a = -2.38819 + 0.46170I$ $b = -1.74404 - 0.51029I$	$-1.71311 - 5.50527I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.352895 + 0.810796I$ $a = 0.78882 - 1.17717I$ $b = -1.12723 - 1.41186I$	$-1.67949 + 0.94183I$	$-10.8843 - 9.4947I$
$u = 0.352895 - 0.810796I$ $a = 0.78882 + 1.17717I$ $b = -1.12723 + 1.41186I$	$-1.67949 - 0.94183I$	$-10.8843 + 9.4947I$
$u = 0.315113 + 0.821727I$ $a = -0.580652 - 0.468579I$ $b = -0.573469 + 0.266582I$	$-0.37334 + 1.83225I$	$0. - 4.52862I$
$u = 0.315113 - 0.821727I$ $a = -0.580652 + 0.468579I$ $b = -0.573469 - 0.266582I$	$-0.37334 - 1.83225I$	$0. + 4.52862I$
$u = 0.867577 + 0.043338I$ $a = -0.623268 + 0.116087I$ $b = 1.33037 + 0.49936I$	$2.42247 - 2.01861I$	$2.49708 + 3.52513I$
$u = 0.867577 - 0.043338I$ $a = -0.623268 - 0.116087I$ $b = 1.33037 - 0.49936I$	$2.42247 + 2.01861I$	$2.49708 - 3.52513I$
$u = 0.700242 + 0.513598I$ $a = 1.287970 + 0.404066I$ $b = -0.339088 + 0.160724I$	$2.60224 - 4.83341I$	$0. + 3.02749I$
$u = 0.700242 - 0.513598I$ $a = 1.287970 - 0.404066I$ $b = -0.339088 - 0.160724I$	$2.60224 + 4.83341I$	$0. - 3.02749I$
$u = -0.287693 + 1.113100I$ $a = 1.44963 - 1.16713I$ $b = 0.878686 + 0.093124I$	$-6.15519 - 0.01094I$	0
$u = -0.287693 - 1.113100I$ $a = 1.44963 + 1.16713I$ $b = 0.878686 - 0.093124I$	$-6.15519 + 0.01094I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.545811 + 0.650639I$ $a = -0.810306 - 0.552974I$ $b = -1.239930 + 0.559096I$	$-0.69728 + 1.59725I$	$-10.3641 - 10.4305I$
$u = 0.545811 - 0.650639I$ $a = -0.810306 + 0.552974I$ $b = -1.239930 - 0.559096I$	$-0.69728 - 1.59725I$	$-10.3641 + 10.4305I$
$u = -0.709748 + 0.918112I$ $a = 0.640953 + 0.301489I$ $b = -0.0237234 + 0.0154603I$	$5.29026 - 5.43982I$	0
$u = -0.709748 - 0.918112I$ $a = 0.640953 - 0.301489I$ $b = -0.0237234 - 0.0154603I$	$5.29026 + 5.43982I$	0
$u = 0.445781 + 1.086450I$ $a = -1.27655 - 0.90303I$ $b = -1.324370 + 0.444155I$	$-0.88677 + 1.99270I$	0
$u = 0.445781 - 1.086450I$ $a = -1.27655 + 0.90303I$ $b = -1.324370 - 0.444155I$	$-0.88677 - 1.99270I$	0
$u = -0.454876 + 1.092700I$ $a = 0.717543 - 0.490926I$ $b = 1.115050 - 0.463229I$	$-3.07340 - 6.23280I$	0
$u = -0.454876 - 1.092700I$ $a = 0.717543 + 0.490926I$ $b = 1.115050 + 0.463229I$	$-3.07340 + 6.23280I$	0
$u = 0.609653 + 1.021970I$ $a = -1.14449 - 1.23571I$ $b = -0.857463 + 0.052267I$	$-4.73465 + 3.54232I$	0
$u = 0.609653 - 1.021970I$ $a = -1.14449 + 1.23571I$ $b = -0.857463 - 0.052267I$	$-4.73465 - 3.54232I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.587458 + 1.053080I$ $a = -0.647859 + 0.564476I$ $b = 0.028015 - 0.257190I$	$0.98595 + 9.80145I$	0
$u = 0.587458 - 1.053080I$ $a = -0.647859 - 0.564476I$ $b = 0.028015 + 0.257190I$	$0.98595 - 9.80145I$	0
$u = -0.606822 + 1.067120I$ $a = -2.09389 + 1.05317I$ $b = -1.68871 - 1.37259I$	$1.71523 - 10.74030I$	0
$u = -0.606822 - 1.067120I$ $a = -2.09389 - 1.05317I$ $b = -1.68871 + 1.37259I$	$1.71523 + 10.74030I$	0
$u = -0.700098 + 0.302563I$ $a = -0.378270 + 0.316282I$ $b = -1.098130 + 0.472865I$	$-2.07326 + 2.81362I$	$-5.52778 - 3.47013I$
$u = -0.700098 - 0.302563I$ $a = -0.378270 - 0.316282I$ $b = -1.098130 - 0.472865I$	$-2.07326 - 2.81362I$	$-5.52778 + 3.47013I$
$u = 0.679607 + 1.037910I$ $a = -0.184954 - 0.146990I$ $b = -0.109159 + 0.786626I$	$1.14303 + 3.39523I$	0
$u = 0.679607 - 1.037910I$ $a = -0.184954 + 0.146990I$ $b = -0.109159 - 0.786626I$	$1.14303 - 3.39523I$	0
$u = -0.545658 + 1.116690I$ $a = 1.83285 - 0.80458I$ $b = 1.44752 + 0.44923I$	$-4.41169 - 7.58690I$	0
$u = -0.545658 - 1.116690I$ $a = 1.83285 + 0.80458I$ $b = 1.44752 - 0.44923I$	$-4.41169 + 7.58690I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.133192 + 1.236390I$ $a = -1.97287 + 0.17268I$ $b = -1.61221 - 0.54295I$	$-10.31880 + 2.36842I$	0
$u = -0.133192 - 1.236390I$ $a = -1.97287 - 0.17268I$ $b = -1.61221 + 0.54295I$	$-10.31880 - 2.36842I$	0
$u = 0.448684 + 0.602812I$ $a = -0.707866 + 0.446014I$ $b = 0.221529 + 0.802517I$	$0.53065 + 1.48051I$	$2.48603 - 4.71879I$
$u = 0.448684 - 0.602812I$ $a = -0.707866 - 0.446014I$ $b = 0.221529 - 0.802517I$	$0.53065 - 1.48051I$	$2.48603 + 4.71879I$
$u = -0.655691 + 1.064710I$ $a = 1.71705 - 0.75459I$ $b = 0.94398 + 1.63599I$	$-0.16943 - 3.63650I$	0
$u = -0.655691 - 1.064710I$ $a = 1.71705 + 0.75459I$ $b = 0.94398 - 1.63599I$	$-0.16943 + 3.63650I$	0
$u = -0.626224 + 1.142340I$ $a = -1.40624 + 1.27677I$ $b = -1.84394 - 0.37994I$	$-6.95506 - 10.74710I$	0
$u = -0.626224 - 1.142340I$ $a = -1.40624 - 1.27677I$ $b = -1.84394 + 0.37994I$	$-6.95506 + 10.74710I$	0
$u = -0.443555 + 1.244120I$ $a = 1.25833 - 0.92533I$ $b = 2.09548 - 0.12003I$	$-3.28489 - 6.00210I$	0
$u = -0.443555 - 1.244120I$ $a = 1.25833 + 0.92533I$ $b = 2.09548 + 0.12003I$	$-3.28489 + 6.00210I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.594249 + 0.222454I$ $a = -0.271831 + 1.018050I$ $b = -0.454127 + 0.242461I$	$-0.55853 + 2.10716I$	$-1.76988 - 3.18079I$
$u = -0.594249 - 0.222454I$ $a = -0.271831 - 1.018050I$ $b = -0.454127 - 0.242461I$	$-0.55853 - 2.10716I$	$-1.76988 + 3.18079I$
$u = 0.665094 + 1.198700I$ $a = 1.75937 + 0.88579I$ $b = 1.75258 - 1.22406I$	$-2.9847 + 17.2020I$	0
$u = 0.665094 - 1.198700I$ $a = 1.75937 - 0.88579I$ $b = 1.75258 + 1.22406I$	$-2.9847 - 17.2020I$	0
$u = 0.08789 + 1.43570I$ $a = 1.56531 + 0.46985I$ $b = 2.07372 + 0.24874I$	$-7.07099 - 7.27755I$	0
$u = 0.08789 - 1.43570I$ $a = 1.56531 - 0.46985I$ $b = 2.07372 - 0.24874I$	$-7.07099 + 7.27755I$	0
$u = 0.62360 + 1.34216I$ $a = -1.64788 - 0.52162I$ $b = -2.05315 + 1.55643I$	$-1.56924 + 7.62859I$	0
$u = 0.62360 - 1.34216I$ $a = -1.64788 + 0.52162I$ $b = -2.05315 - 1.55643I$	$-1.56924 - 7.62859I$	0
$u = -1.17342 + 0.91582I$ $a = 0.459401 - 0.208843I$ $b = -0.657031 + 0.986184I$	$2.63251 - 4.04535I$	0
$u = -1.17342 - 0.91582I$ $a = 0.459401 + 0.208843I$ $b = -0.657031 - 0.986184I$	$2.63251 + 4.04535I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.0686437$ $a = -7.31889$ $b = -0.828764$	-1.42877	-7.46790

II.

$$\boldsymbol{I_2^u = \langle u^{10}+2u^9+\cdots+b+3,\ 3u^{10}+5u^9+\cdots+a+6,\ u^{12}+2u^{11}+\cdots+u+1\rangle}$$

(i) Arc colorings

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

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} -3u^{10}-5u^9+\cdots-u-6 \\ -u^{10}-2u^9-5u^8-6u^7-10u^6-9u^5-12u^4-5u^3-8u^2-u-3 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -2u^{11}-3u^9+3u^8-5u^7+7u^6-6u^5+16u^4-10u^3+13u^2-4u+5 \\ -u^{11}-u^{10}-3u^9-2u^8-6u^7-3u^6-8u^5-7u^3+u^2-3u+1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^{11}+u^{10}+5u^8+u^7+10u^6+2u^5+16u^4-3u^3+12u^2-u+4 \\ -u^{11}-u^{10}-3u^9-2u^8-6u^7-3u^6-8u^5-7u^3+u^2-3u+1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u \\ u^3+u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^3 \\ u^5+u^3+u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^9+u^8+2u^7+u^6+3u^5+u^4+3u^3-2u^2+2u+1 \\ u^{11}+2u^{10}+\cdots+4u+1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^{11}-u^{10}-u^9-7u^8-4u^7-13u^6-5u^5-18u^4+u^3-12u^2+u-5 \\ u^{11}+u^{10}+2u^9+u^7-3u^6-u^5-7u^4-u^3-5u^2-2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -4u^{11}-5u^{10}+\cdots-6u-2 \\ -2u^{11}-4u^{10}+\cdots-4u-3 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -4u^{11}-5u^{10}+\cdots-6u-2 \\ -2u^{11}-4u^{10}+\cdots-4u-3 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= 3u^{11}+15u^{10}+26u^9+48u^8+53u^7+76u^6+62u^5+77u^4+23u^3+49u^2+u+11$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{12} - 2u^{11} + \cdots - u + 1$
c_2	$u^{12} + 6u^{11} + \cdots + 9u + 1$
c_3	$u^{12} + 2u^{10} - u^8 + u^7 - 3u^6 + u^5 - u^4 - u^3 + 2u^2 - u + 1$
c_4	$u^{12} - u^{11} + 2u^{10} - u^9 - u^8 + u^7 - 3u^6 + u^5 - u^4 + 2u^2 + 1$
c_5	$u^{12} + 2u^{11} + \cdots + u + 1$
c_6	$u^{12} + 4u^{11} + \cdots + 3u + 1$
c_7	$u^{12} + u^{11} + 2u^{10} + u^9 - u^8 - u^7 - 3u^6 - u^5 - u^4 + 2u^2 + 1$
c_8	$u^{12} - 6u^{11} + \cdots - 8u + 1$
c_9	$u^{12} + 2u^{10} - u^8 - u^7 - 3u^6 - u^5 - u^4 + u^3 + 2u^2 + u + 1$
c_{10}	$u^{12} - 4u^{11} + \cdots - 3u + 1$
c_{11}	$u^{12} - u^{11} + \cdots - 4u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{12} + 6y^{11} + \cdots + 9y + 1$
c_2	$y^{12} + 6y^{11} + \cdots - 3y + 1$
c_3, c_9	$y^{12} + 4y^{11} + \cdots + 3y + 1$
c_4, c_7	$y^{12} + 3y^{11} + \cdots + 4y + 1$
c_6, c_{10}	$y^{12} - 12y^{11} + \cdots - 9y + 1$
c_8	$y^{12} - 6y^{11} + \cdots - 16y + 1$
c_{11}	$y^{12} + 5y^{11} + \cdots + 8y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.247892+0.947447I$ $a=\ 2.06596-1.45279I$ $b=\ 0.447570-0.087825I$	$-7.17019-1.02030I$	$-13.27326-0.82815I$
$u=-0.247892-0.947447I$ $a=\ 2.06596+1.45279I$ $b=\ 0.447570+0.087825I$	$-7.17019+1.02030I$	$-13.27326+0.82815I$
$u=\ 0.486518+0.993982I$ $a=-1.81523-1.42628I$ $b=-1.65796+0.46014I$	$-2.09528+2.86682I$	$-5.47332-2.30549I$
$u=\ 0.486518-0.993982I$ $a=-1.81523+1.42628I$ $b=-1.65796-0.46014I$	$-2.09528-2.86682I$	$-5.47332+2.30549I$
$u=\ 0.480251+0.690480I$ $a=-0.080921+0.498148I$ $b=\ 1.123790+0.376666I$	$-1.05844+1.11861I$	$-7.61832-5.82501I$
$u=\ 0.480251-0.690480I$ $a=-0.080921-0.498148I$ $b=\ 1.123790-0.376666I$	$-1.05844-1.11861I$	$-7.61832+5.82501I$
$u=-0.452978+1.234890I$ $a=\ 1.84588-0.60605I$ $b=\ 2.20069+0.59926I$	$-2.85303-7.20115I$	$-5.87593+8.65754I$
$u=-0.452978-1.234890I$ $a=\ 1.84588+0.60605I$ $b=\ 2.20069-0.59926I$	$-2.85303+7.20115I$	$-5.87593-8.65754I$
$u=-1.088860+0.855698I$ $a=\ 0.699838-0.056656I$ $b=-0.78061+1.18919I$	$3.28943-3.84736I$	$5.88370+4.17023I$
$u=-1.088860-0.855698I$ $a=\ 0.699838+0.056656I$ $b=-0.78061-1.18919I$	$3.28943+3.84736I$	$5.88370-4.17023I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.177038 + 0.575634I$ $a = -2.21553 + 1.05447I$ $b = -1.33348 + 0.55498I$	$0.01791 + 4.36215I$	$0.35713 - 5.21266I$
$u = -0.177038 - 0.575634I$ $a = -2.21553 - 1.05447I$ $b = -1.33348 - 0.55498I$	$0.01791 - 4.36215I$	$0.35713 + 5.21266I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{12}-2u^{11}+\cdots-u+1)(u^{81}-u^{80}+\cdots+146u+11)$
c_2	$(u^{12}+6u^{11}+\cdots+9u+1)(u^{81}+37u^{80}+\cdots+24110u-121)$
c_3	$(u^{12}+2u^{10}-u^8+u^7-3u^6+u^5-u^4-u^3+2u^2-u+1)$ $\cdot\,(u^{81}-u^{80}+\cdots+4136u+361)$
c_4	$(u^{12}-u^{11}+2u^{10}-u^9-u^8+u^7-3u^6+u^5-u^4+2u^2+1)$ $\cdot\,(u^{81}-4u^{80}+\cdots-337u+79)$
c_5	$(u^{12}+2u^{11}+\cdots+u+1)(u^{81}-u^{80}+\cdots+146u+11)$
c_6	$(u^{12}+4u^{11}+\cdots+3u+1)(u^{81}+u^{80}+\cdots+204u+53)$
c_7	$(u^{12}+u^{11}+2u^{10}+u^9-u^8-u^7-3u^6-u^5-u^4+2u^2+1)$ $\cdot\,(u^{81}-4u^{80}+\cdots-337u+79)$
c_8	$(u^{12}-6u^{11}+\cdots-8u+1)(u^{81}-3u^{80}+\cdots-19u+1)$
c_9	$(u^{12}+2u^{10}-u^8-u^7-3u^6-u^5-u^4+u^3+2u^2+u+1)$ $\cdot\,(u^{81}-u^{80}+\cdots+4136u+361)$
c_{10}	$(u^{12}-4u^{11}+\cdots-3u+1)(u^{81}+u^{80}+\cdots+204u+53)$
c_{11}	$(u^{12}-u^{11}+\cdots-4u+1)(u^{81}-6u^{80}+\cdots+13u-1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{12}+6y^{11}+\cdots+9y+1)(y^{81}+37y^{80}+\cdots+24110y-121)$
c_2	$(y^{12}+6y^{11}+\cdots-3y+1)(y^{81}+21y^{80}+\cdots+6.59238\times 10^{8}y-14641)$
c_3, c_9	$(y^{12}+4y^{11}+\cdots+3y+1)(y^{81}+51y^{80}+\cdots-2871244y-130321)$
c_4, c_7	$(y^{12}+3y^{11}+\cdots+4y+1)(y^{81}+46y^{80}+\cdots-118533y-6241)$
c_6, c_{10}	$(y^{12}-12y^{11}+\cdots-9y+1)(y^{81}-53y^{80}+\cdots-83040y-2809)$
c_8	$(y^{12}-6y^{11}+\cdots-16y+1)(y^{81}-11y^{80}+\cdots+39y-1)$
c_{11}	$(y^{12}+5y^{11}+\cdots+8y+1)(y^{81}+8y^{80}+\cdots-25y-1)$