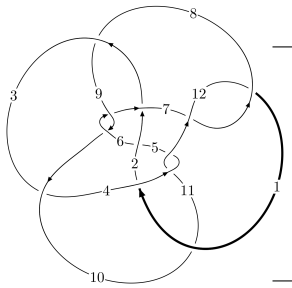
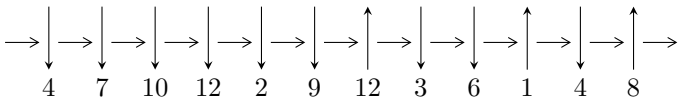
$12n_{0861}$ $(K12n_{0861})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

$$\underset{c_1}{1,4} \underset{c_{12}}{\to} \underset{c_4}{2,8} \underset{c_5}{\to} 12 \underset{c_7}{\to} 5 \underset{c_{11}}{\longrightarrow} 6 \underset{c_{10}}{\to} 7 \underset{c_3}{\to} 11 \underset{c_9}{\to} 10 \to 3 \longrightarrow 9 \longrightarrow\!\!\!\!\to c_2, c_6, c_8$$

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

$$\begin{aligned} I_1^u = \langle & -3.52500 \times 10^{352} u^{75} + 2.44054 \times 10^{352} u^{74} + \cdots + 7.62932 \times 10^{355} b - 3.61083 \times 10^{356}, \\ & 1.06932 \times 10^{357} u^{75} - 9.06361 \times 10^{356} u^{74} + \cdots + 1.73575 \times 10^{360} a + 3.60585 \times 10^{361}, \\ & u^{76} - u^{75} + \cdots + 300923u - 22751 \rangle \\ I_2^u = \langle & 1.63851 \times 10^{16} u^{28} - 1.05439 \times 10^{17} u^{27} + \cdots + 2.06022 \times 10^{16} b + 2.70631 \times 10^{16}, \\ & - 1.08672 \times 10^{17} u^{28} + 6.98492 \times 10^{17} u^{27} + \cdots + 2.06022 \times 10^{16} a - 1.87524 \times 10^{17}, \ u^{29} - 6u^{28} + \cdots + 3u + \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 105 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. $\boldsymbol{I_1^u = \langle -3.52 \times 10^{352} u^{75} + 2.44 \times 10^{352} u^{74} + \cdots + 7.63 \times 10^{355} b - 3.61 \times 10^{356},\ 1.07 \times 10^{357} u^{75} - 9.06 \times 10^{356} u^{74} + \cdots + 1.74 \times 10^{360} a + 3.61 \times 10^{361},\ u^{76} - u^{75} + \cdots + 300923u - 22751 \rangle}$

(i) Arc colorings

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

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

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

$$a_8 = \begin{pmatrix} -0.000616058u^{75} + 0.000522174u^{74} + \cdots + 215.201u - 20.7741 \\ 0.000462033u^{75} - 0.000319890u^{74} + \cdots - 58.5348u + 4.73283 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.000551004u^{75} + 0.000291524u^{74} + \cdots + 274.093u - 26.3938 \\ 0.000186949u^{75} - 0.000146137u^{74} + \cdots - 131.746u + 12.9652 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.0000761766u^{75} - 0.000159869u^{74} + \cdots - 182.673u + 18.3344 \\ 0.000150608u^{75} - 0.000110104u^{74} + \cdots - 11.9614u + 0.330376 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.0000399552u^{75} + 0.0000247574u^{74} + \cdots - 143.793u + 16.0999 \\ 0.000269364u^{75} - 0.000203992u^{74} + \cdots - 35.2152u + 1.88871 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.000554392u^{75} + 0.000760906u^{74} + \cdots + 286.400u - 25.1589 \\ 0.000189206u^{75} - 0.000484611u^{74} + \cdots - 184.889u + 14.2787 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.000551004u^{75} + 0.000291524u^{74} + \cdots + 274.093u - 26.3938 \\ 0.000221974u^{75} - 0.000216748u^{74} + \cdots - 197.293u + 18.8687 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.000772978u^{75} + 0.000508271u^{74} + \cdots + 471.387u - 45.2625 \\ 0.000221974u^{75} - 0.000216748u^{74} + \cdots - 197.293u + 18.8687 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -3.12392 \times 10^{-6} u^{75} - 0.000182643u^{74} + \cdots + 63.4430u - 9.84321 \\ 0.0000430791u^{75} + 0.000157885u^{74} + \cdots + 80.3500u - 6.25668 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.000272927u^{75} - 0.0000644983u^{74} + \cdots + 230.916u - 26.2228 \\ -0.0000751541u^{75} + 0.000223603u^{74} + \cdots - 12.0363u + 4.65606 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.00205545u^{75} + 0.000950151u^{74} + \cdots + 1477.37u - 145.995$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{76}+u^{75}+\cdots-300923u-22751$
c_2	$u^{76}-2u^{75}+\cdots-180357u-34261$
c_3	$u^{76}-3u^{75}+\cdots+950u-239$
c_4, c_{11}	$u^{76}+u^{75}+\cdots-1646518u-62039$
c_5	$u^{76}-4u^{75}+\cdots+291884216u-85317983$
c_6, c_9	$u^{76}-3u^{75}+\cdots-42u+23$
c_7, c_{12}	$u^{76}+2u^{75}+\cdots-u+31$
c_8	$u^{76}+u^{75}+\cdots-18688u-11776$
c_{10}	$u^{76}+6u^{75}+\cdots+2676u+188$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{76} + 85y^{75} + \cdots - 1833669277y + 517608001$
c_2	$y^{76} + 36y^{75} + \cdots + 45049425637y + 1173816121$
c_3	$y^{76} - 31y^{75} + \cdots - 1544932y + 57121$
c_4, c_{11}	$y^{76} + 111y^{75} + \cdots + 216897789578y + 3848837521$
c_5	$y^{76} + 74y^{75} + \cdots - 351345007231565290y + 7279158223188289$
c_6, c_9	$y^{76} + 51y^{75} + \cdots - 8066y + 529$
c_7, c_{12}	$y^{76} - 58y^{75} + \cdots - 81903y + 961$
c_8	$y^{76} + 15y^{75} + \cdots + 1338966016y + 138674176$
c_{10}	$y^{76} - 96y^{75} + \cdots - 10840512y + 35344$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.745344+0.628629I$ $a=\ \ 0.638596-0.882206I$ $b=-1.288040-0.178047I$	$7.01585-1.22697I$	0
$u=-0.745344-0.628629I$ $a=\ \ 0.638596+0.882206I$ $b=-1.288040+0.178047I$	$7.01585+1.22697I$	0
$u=\ \ 0.020527+0.950968I$ $a=-1.127270-0.499083I$ $b=-0.722798+0.214158I$	$8.72656-0.96900I$	0
$u=\ \ 0.020527-0.950968I$ $a=-1.127270+0.499083I$ $b=-0.722798-0.214158I$	$8.72656+0.96900I$	0
$u=\ \ 0.727085+0.569994I$ $a=-0.801002+0.627162I$ $b=\ \ 0.648815+0.029076I$	$0.99072-2.35150I$	0
$u=\ \ 0.727085-0.569994I$ $a=-0.801002-0.627162I$ $b=\ \ 0.648815-0.029076I$	$0.99072+2.35150I$	0
$u=\ \ 0.621479+0.677375I$ $a=-0.16397-1.43224I$ $b=\ \ 1.386790+0.087175I$	$3.03454+6.06445I$	0
$u=\ \ 0.621479-0.677375I$ $a=-0.16397+1.43224I$ $b=\ \ 1.386790-0.087175I$	$3.03454-6.06445I$	0
$u=-0.126756+0.902600I$ $a=-0.109634+0.577545I$ $b=\ \ 0.404644+0.757455I$	$1.54671-3.66888I$	$-6.00000+0.I$
$u=-0.126756-0.902600I$ $a=-0.109634-0.577545I$ $b=\ \ 0.404644-0.757455I$	$1.54671+3.66888I$	$-6.00000+0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.825725 + 0.760842I$ $a = 0.390520 + 0.782654I$ $b = -1.279230 - 0.250596I$	$-0.60298 + 1.46108I$	0
$u = 0.825725 - 0.760842I$ $a = 0.390520 - 0.782654I$ $b = -1.279230 + 0.250596I$	$-0.60298 - 1.46108I$	0
$u = 0.360627 + 0.796177I$ $a = 0.508375 - 0.143903I$ $b = -0.720350 - 0.667858I$	$-1.343280 + 0.170584I$	$-9.40191 + 0.I$
$u = 0.360627 - 0.796177I$ $a = 0.508375 + 0.143903I$ $b = -0.720350 + 0.667858I$	$-1.343280 - 0.170584I$	$-9.40191 + 0.I$
$u = 1.118660 + 0.264884I$ $a = 0.864685 + 0.423066I$ $b = -0.841814 - 0.122191I$	$-0.156617 + 0.099671I$	0
$u = 1.118660 - 0.264884I$ $a = 0.864685 - 0.423066I$ $b = -0.841814 + 0.122191I$	$-0.156617 - 0.099671I$	0
$u = 0.763976 + 0.362230I$ $a = 0.98638 + 1.88979I$ $b = -0.402873 + 1.099930I$	$-4.31920 - 3.42786I$	$-19.8780 + 4.5386I$
$u = 0.763976 - 0.362230I$ $a = 0.98638 - 1.88979I$ $b = -0.402873 - 1.099930I$	$-4.31920 + 3.42786I$	$-19.8780 - 4.5386I$
$u = 0.085627 + 0.830294I$ $a = -0.607873 - 1.037560I$ $b = 1.106530 - 0.524906I$	$3.67066 - 8.51476I$	$0. + 8.44330I$
$u = 0.085627 - 0.830294I$ $a = -0.607873 + 1.037560I$ $b = 1.106530 + 0.524906I$	$3.67066 + 8.51476I$	$0. - 8.44330I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.218030+0.054638I$ $a=-0.196176+0.535276I$ $b=1.37856+0.40360I$	$2.04240+2.56590I$	0
$u=-1.218030-0.054638I$ $a=-0.196176-0.535276I$ $b=1.37856-0.40360I$	$2.04240-2.56590I$	0
$u=0.272344+1.191320I$ $a=-0.033570+0.340343I$ $b=0.363637-0.018798I$	$2.51398-2.03885I$	0
$u=0.272344-1.191320I$ $a=-0.033570-0.340343I$ $b=0.363637+0.018798I$	$2.51398+2.03885I$	0
$u=0.147091+0.751571I$ $a=0.750874+0.500899I$ $b=-1.008700+0.583869I$	$-0.23633-4.75906I$	$-6.00000+8.13977I$
$u=0.147091-0.751571I$ $a=0.750874-0.500899I$ $b=-1.008700-0.583869I$	$-0.23633+4.75906I$	$-6.00000-8.13977I$
$u=-1.202870+0.464965I$ $a=-0.214421+1.159960I$ $b=0.395217+1.242940I$	$-1.75971+3.56787I$	0
$u=-1.202870-0.464965I$ $a=-0.214421-1.159960I$ $b=0.395217-1.242940I$	$-1.75971-3.56787I$	0
$u=0.180012+0.660238I$ $a=-1.42717+0.72834I$ $b=0.987544-0.454175I$	$2.60983-3.55639I$	$-1.71782+4.54707I$
$u=0.180012-0.660238I$ $a=-1.42717-0.72834I$ $b=0.987544+0.454175I$	$2.60983+3.55639I$	$-1.71782-4.54707I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.265518 + 0.599050I$ $a = 0.898932 - 0.825195I$ $b = -0.984381 + 0.600542I$	$1.50045 - 3.70876I$	$-1.41090 + 2.23872I$
$u = 0.265518 - 0.599050I$ $a = 0.898932 + 0.825195I$ $b = -0.984381 - 0.600542I$	$1.50045 + 3.70876I$	$-1.41090 - 2.23872I$
$u = -0.577191 + 0.293566I$ $a = 2.84221 + 1.82785I$ $b = 0.207376 + 0.118904I$	$-1.52793 + 5.92164I$	$-15.0040 - 10.8200I$
$u = -0.577191 - 0.293566I$ $a = 2.84221 - 1.82785I$ $b = 0.207376 - 0.118904I$	$-1.52793 - 5.92164I$	$-15.0040 + 10.8200I$
$u = 0.576435 + 0.027198I$ $a = 0.345959 - 0.803920I$ $b = -0.225583 + 0.466790I$	$-0.192361 - 0.594079I$	$-7.06569 + 1.37870I$
$u = 0.576435 - 0.027198I$ $a = 0.345959 + 0.803920I$ $b = -0.225583 - 0.466790I$	$-0.192361 + 0.594079I$	$-7.06569 - 1.37870I$
$u = -0.561296$ $a = -4.20681$ $b = -0.187845$	-5.66991	-25.0200
$u = 0.559589$ $a = 0.749078$ $b = -0.400812$	-0.827641	-12.6600
$u = 0.25722 + 1.42794I$ $a = 2.05582 + 0.52788I$ $b = -1.274310 - 0.019943I$	$11.20280 - 0.15528I$	0
$u = 0.25722 - 1.42794I$ $a = 2.05582 - 0.52788I$ $b = -1.274310 + 0.019943I$	$11.20280 + 0.15528I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.97136 + 1.08637I$ $a = -0.995241 - 0.731028I$ $b = 1.135640 + 0.056806I$	$2.35456 - 2.27995I$	0
$u = 0.97136 - 1.08637I$ $a = -0.995241 + 0.731028I$ $b = 1.135640 - 0.056806I$	$2.35456 + 2.27995I$	0
$u = 0.30853 + 1.43443I$ $a = 0.284046 - 0.099194I$ $b = -0.277549 - 0.312634I$	$4.40418 - 4.79001I$	0
$u = 0.30853 - 1.43443I$ $a = 0.284046 + 0.099194I$ $b = -0.277549 + 0.312634I$	$4.40418 + 4.79001I$	0
$u = -0.067455 + 0.452588I$ $a = 0.477832 + 0.316060I$ $b = 0.930631 - 0.514027I$	$1.43480 - 1.90006I$	$-0.70055 + 2.19888I$
$u = -0.067455 - 0.452588I$ $a = 0.477832 - 0.316060I$ $b = 0.930631 + 0.514027I$	$1.43480 + 1.90006I$	$-0.70055 - 2.19888I$
$u = -1.55658 + 0.38390I$ $a = 0.407638 - 0.407877I$ $b = -1.46643 - 0.28303I$	$4.94644 + 8.22620I$	0
$u = -1.55658 - 0.38390I$ $a = 0.407638 + 0.407877I$ $b = -1.46643 + 0.28303I$	$4.94644 - 8.22620I$	0
$u = -0.26666 + 1.59851I$ $a = -0.215919 - 0.059608I$ $b = -0.210777 + 1.071740I$	$9.54808 - 2.17862I$	0
$u = -0.26666 - 1.59851I$ $a = -0.215919 + 0.059608I$ $b = -0.210777 - 1.071740I$	$9.54808 + 2.17862I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.01828 + 1.67725I$ $a = -1.61898 + 0.17473I$ $b = 1.52774 - 0.01220I$	$10.91570 - 4.00758I$	0
$u = 0.01828 - 1.67725I$ $a = -1.61898 - 0.17473I$ $b = 1.52774 + 0.01220I$	$10.91570 + 4.00758I$	0
$u = 0.282838 + 0.079836I$ $a = -1.25772 + 1.67744I$ $b = 0.704308 - 0.473313I$	$0.84979 - 1.97171I$	$-2.94349 + 5.82225I$
$u = 0.282838 - 0.079836I$ $a = -1.25772 - 1.67744I$ $b = 0.704308 + 0.473313I$	$0.84979 + 1.97171I$	$-2.94349 - 5.82225I$
$u = 0.44868 + 1.68762I$ $a = -1.54430 - 0.42875I$ $b = 1.261110 - 0.081880I$	$5.65141 - 2.61228I$	0
$u = 0.44868 - 1.68762I$ $a = -1.54430 + 0.42875I$ $b = 1.261110 + 0.081880I$	$5.65141 + 2.61228I$	0
$u = -0.69546 + 1.62144I$ $a = 1.147750 - 0.810044I$ $b = -1.37785 - 0.72108I$	$12.83640 + 4.42759I$	0
$u = -0.69546 - 1.62144I$ $a = 1.147750 + 0.810044I$ $b = -1.37785 + 0.72108I$	$12.83640 - 4.42759I$	0
$u = -0.03860 + 1.79969I$ $a = 1.389460 - 0.106592I$ $b = -1.57865 + 0.10854I$	$9.56745 - 3.21352I$	0
$u = -0.03860 - 1.79969I$ $a = 1.389460 + 0.106592I$ $b = -1.57865 - 0.10854I$	$9.56745 + 3.21352I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.24078+1.82244I$ $a=-0.1001830-0.0695988I$ $b=-0.00953+1.44601I$	$7.24266+9.15838I$	0
$u=-0.24078-1.82244I$ $a=-0.1001830+0.0695988I$ $b=-0.00953-1.44601I$	$7.24266-9.15838I$	0
$u=-0.38183+1.81667I$ $a=\ \ 0.1287720+0.0315564I$ $b=\ \ 0.23828-1.46403I$	$3.74470+2.77968I$	0
$u=-0.38183-1.81667I$ $a=\ \ 0.1287720-0.0315564I$ $b=\ \ 0.23828+1.46403I$	$3.74470-2.77968I$	0
$u=-0.67554+1.79315I$ $a=-1.146360+0.625617I$ $b=\ \ 1.49240+0.68959I$	$7.94098+10.39540I$	0
$u=-0.67554-1.79315I$ $a=-1.146360-0.625617I$ $b=\ \ 1.49240-0.68959I$	$7.94098-10.39540I$	0
$u=-0.59997+1.83527I$ $a=\ \ 1.210690-0.563117I$ $b=-1.50417-0.64157I$	$12.0200+16.4075I$	0
$u=-0.59997-1.83527I$ $a=\ \ 1.210690+0.563117I$ $b=-1.50417+0.64157I$	$12.0200-16.4075I$	0
$u=\ \ 0.03558+1.95180I$ $a=-1.300520-0.212919I$ $b=\ \ 1.43479-0.47900I$	$14.6402-7.6727I$	0
$u=\ \ 0.03558-1.95180I$ $a=-1.300520+0.212919I$ $b=\ \ 1.43479+0.47900I$	$14.6402+7.6727I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.05564 + 1.95942I$ $a = 1.251980 + 0.136007I$ $b = -1.58037 + 0.38673I$	$10.27980 - 3.77420I$	0
$u = 0.05564 - 1.95942I$ $a = 1.251980 - 0.136007I$ $b = -1.58037 - 0.38673I$	$10.27980 + 3.77420I$	0
$u = 0.38826 + 1.93316I$ $a = 1.42376 + 0.30397I$ $b = -1.262730 + 0.174887I$	$7.68773 - 6.74339I$	0
$u = 0.38826 - 1.93316I$ $a = 1.42376 - 0.30397I$ $b = -1.262730 - 0.174887I$	$7.68773 + 6.74339I$	0
$u = 0.16244 + 1.98102I$ $a = -1.132750 - 0.227902I$ $b = 1.70644 - 0.59120I$	$12.71850 + 1.45775I$	0
$u = 0.16244 - 1.98102I$ $a = -1.132750 + 0.227902I$ $b = 1.70644 + 0.59120I$	$12.71850 - 1.45775I$	0

II.

$\boldsymbol{I_2^u = \langle 1.64\times10^{16}u^{28}-1.05\times10^{17}u^{27}+\cdots+2.06\times10^{16}b+2.71\times10^{16},\ -1.09\times10^{17}u^{28}+6.98\times10^{17}u^{27}+\cdots+2.06\times10^{16}a-1.88\times10^{17},\ u^{29}-6u^{28}+\cdots+3u+1\rangle}$

(i) Arc colorings

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

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

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

$$a_8 = \begin{pmatrix}5.27476u^{28}-33.9037u^{27}+\cdots+8.71342u+9.10213\\-0.795306u^{28}+5.11785u^{27}+\cdots-1.44520u-1.31360\end{pmatrix}$$

$$a_{12} = \begin{pmatrix}-0.873952u^{28}+5.57757u^{27}+\cdots-0.432124u-3.91280\\0.100754u^{28}-0.413558u^{27}+\cdots-0.187948u+0.327168\end{pmatrix}$$

$$a_5 = \begin{pmatrix}0.979568u^{28}-5.87044u^{27}+\cdots+0.0162660u+4.14203\\-0.113181u^{28}+0.795544u^{27}+\cdots+2.01581u+0.135065\end{pmatrix}$$

$$a_6 = \begin{pmatrix}u^{28}-6u^{27}+\cdots-3u+4\\-0.0204323u^{28}+0.129558u^{27}+\cdots+2.01627u+0.142029\end{pmatrix}$$

$$a_7 = \begin{pmatrix}4.09510u^{28}-26.3923u^{27}+\cdots+7.13642u+6.99365\\-0.820942u^{28}+5.02861u^{27}+\cdots-0.0730875u-0.703261\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-0.873952u^{28}+5.57757u^{27}+\cdots-0.432124u-3.91280\\0.184622u^{28}-1.08159u^{27}+\cdots-0.0603329u+0.661024\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}-1.05857u^{28}+6.65916u^{27}+\cdots-0.371791u-4.57382\\0.184622u^{28}-1.08159u^{27}+\cdots-0.0603329u+0.661024\end{pmatrix}$$

$$a_3 = \begin{pmatrix}-0.982205u^{28}+6.25792u^{27}+\cdots+2.82992u-4.37507\\-0.0177953u^{28}-0.257924u^{27}+\cdots+0.170078u+0.375072\end{pmatrix}$$

$$a_9 = \begin{pmatrix}0.517381u^{28}-3.85054u^{27}+\cdots-1.46246u-1.45227\\0.366015u^{28}-2.30882u^{27}+\cdots+1.01287u+1.15728\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$$= \frac{5020408209776801}{20602204490473833}u^{28}-\frac{20930493412487363}{20602204490473833}u^{27}+\cdots-\frac{250778254491184010}{20602204490473833}u-\frac{84750696773007142}{20602204490473833}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{29} - 6u^{28} + \cdots + 3u + 1$
c_2	$u^{29} - u^{28} + \cdots - u + 1$
c_3	$u^{29} - 2u^{28} + \cdots + 2u + 9$
c_4	$u^{29} + 10u^{27} + \cdots + 2u + 1$
c_5	$u^{29} - 3u^{28} + \cdots + 8u - 3$
c_6	$u^{29} - 4u^{28} + \cdots + 8u - 5$
c_7	$u^{29} + u^{28} + \cdots - 3u - 1$
c_8	$u^{29} - 2u^{27} + \cdots + u - 1$
c_9	$u^{29} + 4u^{28} + \cdots + 8u + 5$
c_{10}	$u^{29} + 11u^{28} + \cdots + 272u + 64$
c_{11}	$u^{29} + 10u^{27} + \cdots + 2u - 1$
c_{12}	$u^{29} - u^{28} + \cdots - 3u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{29} + 14y^{28} + \cdots + 13y - 1$
c_2	$y^{29} + 5y^{28} + \cdots - 25y - 1$
c_3	$y^{29} - 22y^{28} + \cdots + 1120y - 81$
c_4, c_{11}	$y^{29} + 20y^{28} + \cdots - 6y - 1$
c_5	$y^{29} + 23y^{28} + \cdots - 2210y - 9$
c_6, c_9	$y^{29} + 20y^{28} + \cdots - 246y - 25$
c_7, c_{12}	$y^{29} - 17y^{28} + \cdots + 15y - 1$
c_8	$y^{29} - 4y^{28} + \cdots + 19y - 1$
c_{10}	$y^{29} - 31y^{28} + \cdots + 35456y - 4096$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.259109 + 0.945037I$ $a = -1.080660 - 0.357074I$ $b = -0.780404 - 0.324779I$	$8.64197 + 0.21685I$	$-2.86434 + 2.12533I$
$u = 0.259109 - 0.945037I$ $a = -1.080660 + 0.357074I$ $b = -0.780404 + 0.324779I$	$8.64197 - 0.21685I$	$-2.86434 - 2.12533I$
$u = 0.704526 + 0.745254I$ $a = 0.972567 - 0.007301I$ $b = -0.897192 + 0.447753I$	$0.82005 - 4.34238I$	$-9.35046 + 9.67287I$
$u = 0.704526 - 0.745254I$ $a = 0.972567 + 0.007301I$ $b = -0.897192 - 0.447753I$	$0.82005 + 4.34238I$	$-9.35046 - 9.67287I$
$u = 1.096450 + 0.340678I$ $a = -0.782276 + 0.014378I$ $b = 0.952711 + 0.288700I$	$-0.096889 + 1.059210I$	$-5.71610 - 5.66520I$
$u = 1.096450 - 0.340678I$ $a = -0.782276 - 0.014378I$ $b = 0.952711 - 0.288700I$	$-0.096889 - 1.059210I$	$-5.71610 + 5.66520I$
$u = -0.731144 + 0.434174I$ $a = 1.00977 - 1.81449I$ $b = -0.401645 - 1.267120I$	$-3.92079 + 3.42406I$	$1.01570 - 3.66847I$
$u = -0.731144 - 0.434174I$ $a = 1.00977 + 1.81449I$ $b = -0.401645 + 1.267120I$	$-3.92079 - 3.42406I$	$1.01570 + 3.66847I$
$u = 1.135540 + 0.454612I$ $a = -0.159669 - 1.216070I$ $b = 0.461864 - 1.034650I$	$-2.22120 - 3.35796I$	$-11.56383 + 0.08079I$
$u = 1.135540 - 0.454612I$ $a = -0.159669 + 1.216070I$ $b = 0.461864 + 1.034650I$	$-2.22120 + 3.35796I$	$-11.56383 - 0.08079I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.851882 + 0.878765I$ $a = 1.077320 + 0.062467I$ $b = -0.923927 - 0.409470I$	$0.835073 - 0.864790I$	$-3.44234 + 1.11234I$
$u = 0.851882 - 0.878765I$ $a = 1.077320 - 0.062467I$ $b = -0.923927 + 0.409470I$	$0.835073 + 0.864790I$	$-3.44234 - 1.11234I$
$u = 0.754297 + 0.141451I$ $a = -0.841119 + 0.675278I$ $b = 1.035810 + 0.412800I$	$0.565382 + 1.291710I$	$-7.41669 + 1.05659I$
$u = 0.754297 - 0.141451I$ $a = -0.841119 - 0.675278I$ $b = 1.035810 - 0.412800I$	$0.565382 - 1.291710I$	$-7.41669 - 1.05659I$
$u = -0.479702 + 0.524804I$ $a = -0.255705 - 0.662679I$ $b = -1.227420 + 0.667940I$	$-0.81307 - 3.28943I$	$-7.56569 + 2.62758I$
$u = -0.479702 - 0.524804I$ $a = -0.255705 + 0.662679I$ $b = -1.227420 - 0.667940I$	$-0.81307 + 3.28943I$	$-7.56569 - 2.62758I$
$u = -0.634588 + 0.145110I$ $a = 1.023890 + 0.427581I$ $b = 1.288000 + 0.395187I$	$2.06821 + 7.80740I$	$-5.10645 - 6.62516I$
$u = -0.634588 - 0.145110I$ $a = 1.023890 - 0.427581I$ $b = 1.288000 - 0.395187I$	$2.06821 - 7.80740I$	$-5.10645 + 6.62516I$
$u = 0.292740 + 1.369130I$ $a = 0.271069 + 0.041571I$ $b = 0.052853 + 0.634842I$	$1.86887 - 2.01799I$	$-10.56338 + 1.39675I$
$u = 0.292740 - 1.369130I$ $a = 0.271069 - 0.041571I$ $b = 0.052853 - 0.634842I$	$1.86887 + 2.01799I$	$-10.56338 - 1.39675I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ 0.20003 + 1.41050I$ $a = -0.379616 - 0.305394I$ $b = \ 0.478129 - 0.287288I$	$4.64971 - 5.47671I$	$-0.30377 + 8.70786I$
$u = \ 0.20003 - 1.41050I$ $a = -0.379616 + 0.305394I$ $b = \ 0.478129 + 0.287288I$	$4.64971 + 5.47671I$	$-0.30377 - 8.70786I$
$u = -0.398804 + 0.328085I$ $a = -3.88733 - 2.80334I$ $b = \ 0.604532 - 0.070140I$	$-1.15102 + 5.69646I$	$1.06495 - 1.13297I$
$u = -0.398804 - 0.328085I$ $a = -3.88733 + 2.80334I$ $b = \ 0.604532 + 0.070140I$	$-1.15102 - 5.69646I$	$1.06495 + 1.13297I$
$u = \ 0.17820 + 1.57230I$ $a = \ 1.78506 + 0.24543I$ $b = -1.42479 + 0.21602I$	$11.35920 - 2.31492I$	$0.59328 + 1.42865I$
$u = \ 0.17820 - 1.57230I$ $a = \ 1.78506 - 0.24543I$ $b = -1.42479 - 0.21602I$	$11.35920 + 2.31492I$	$0.59328 - 1.42865I$
$u = -0.403835$ $a = \ 6.22569$ $b = -0.575344$	-5.33901	0.139890
$u = -0.02661 + 1.85032I$ $a = -1.366150 + 0.138779I$ $b = \ 1.56915 - 0.00379I$	$9.67281 - 4.05990I$	$-3.35082 + 7.08829I$
$u = -0.02661 - 1.85032I$ $a = -1.366150 - 0.138779I$ $b = \ 1.56915 + 0.00379I$	$9.67281 + 4.05990I$	$-3.35082 - 7.08829I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{29}-6u^{28}+\cdots+3u+1)(u^{76}+u^{75}+\cdots-300923u-22751)$
c_2	$(u^{29}-u^{28}+\cdots-u+1)(u^{76}-2u^{75}+\cdots-180357u-34261)$
c_3	$(u^{29}-2u^{28}+\cdots+2u+9)(u^{76}-3u^{75}+\cdots+950u-239)$
c_4	$(u^{29}+10u^{27}+\cdots+2u+1)(u^{76}+u^{75}+\cdots-1646518u-62039)$
c_5	$(u^{29}-3u^{28}+\cdots+8u-3)$ $\cdot(u^{76}-4u^{75}+\cdots+291884216u-85317983)$
c_6	$(u^{29}-4u^{28}+\cdots+8u-5)(u^{76}-3u^{75}+\cdots-42u+23)$
c_7	$(u^{29}+u^{28}+\cdots-3u-1)(u^{76}+2u^{75}+\cdots-u+31)$
c_8	$(u^{29}-2u^{27}+\cdots+u-1)(u^{76}+u^{75}+\cdots-18688u-11776)$
c_9	$(u^{29}+4u^{28}+\cdots+8u+5)(u^{76}-3u^{75}+\cdots-42u+23)$
c_{10}	$(u^{29}+11u^{28}+\cdots+272u+64)(u^{76}+6u^{75}+\cdots+2676u+188)$
c_{11}	$(u^{29}+10u^{27}+\cdots+2u-1)(u^{76}+u^{75}+\cdots-1646518u-62039)$
c_{12}	$(u^{29}-u^{28}+\cdots-3u+1)(u^{76}+2u^{75}+\cdots-u+31)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{29}+14y^{28}+\cdots+13y-1)$ $\cdot(y^{76}+85y^{75}+\cdots-1833669277y+517608001)$
c_2	$(y^{29}+5y^{28}+\cdots-25y-1)$ $\cdot(y^{76}+36y^{75}+\cdots+45049425637y+1173816121)$
c_3	$(y^{29}-22y^{28}+\cdots+1120y-81)$ $\cdot(y^{76}-31y^{75}+\cdots-1544932y+57121)$
c_4, c_{11}	$(y^{29}+20y^{28}+\cdots-6y-1)$ $\cdot(y^{76}+111y^{75}+\cdots+216897789578y+3848837521)$
c_5	$(y^{29}+23y^{28}+\cdots-2210y-9)$ $\cdot(y^{76}+74y^{75}+\cdots-351345007231565290y+7279158223188289)$
c_6, c_9	$(y^{29}+20y^{28}+\cdots-246y-25)(y^{76}+51y^{75}+\cdots-8066y+529)$
c_7, c_{12}	$(y^{29}-17y^{28}+\cdots+15y-1)(y^{76}-58y^{75}+\cdots-81903y+961)$
c_8	$(y^{29}-4y^{28}+\cdots+19y-1)$ $\cdot(y^{76}+15y^{75}+\cdots+1338966016y+138674176)$
c_{10}	$(y^{29}-31y^{28}+\cdots+35456y-4096)$ $\cdot(y^{76}-96y^{75}+\cdots-10840512y+35344)$