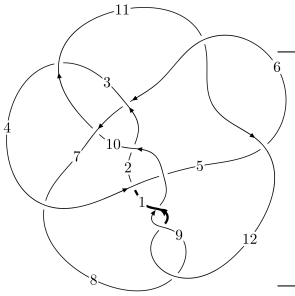
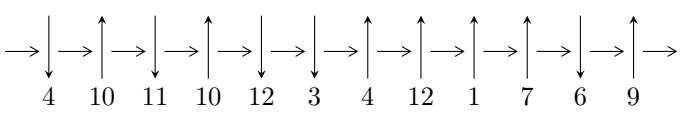
$12n_{0712}$ $(K12n_{0712})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 7.16436 \times 10^{249} u^{75} + 2.01743 \times 10^{250} u^{74} + \cdots + 3.69252 \times 10^{250} b - 9.34607 \times 10^{250},$$
$$8.19251 \times 10^{249} u^{75} + 2.51790 \times 10^{250} u^{74} + \cdots + 3.69252 \times 10^{250} a - 2.00281 \times 10^{251},\ u^{76} + 3u^{75} + \cdots - 40u$$
$$I_2^u = \langle -6040320 u^{16} + 4996901 u^{15} + \cdots + 9996367 b - 9918960,$$
$$1258838 u^{16} - 20888294 u^{15} + \cdots + 9996367 a + 50252931,\ u^{17} + 3u^{15} + \cdots + u - 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 93 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. $\boldsymbol{I_1^u = \langle 7.16 \times 10^{249} u^{75} + 2.02 \times 10^{250} u^{74} + \cdots + 3.69 \times 10^{250} b - 9.35 \times 10^{250},\ 8.19 \times 10^{249} u^{75} + 2.52 \times 10^{250} u^{74} + \cdots + 3.69 \times 10^{250} a - 2.00 \times 10^{251},\ u^{76} + 3u^{75} + \cdots - 40u - 8 \rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

$$a_7 = \begin{pmatrix} -0.221867u^{75} - 0.681890u^{74} + \cdots + 21.9887u + 5.42396 \\ -0.194023u^{75} - 0.546355u^{74} + \cdots + 17.3170u + 2.53108 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -0.444577u^{75} - 1.31396u^{74} + \cdots + 41.7321u + 8.08534 \\ -0.189585u^{75} - 0.533144u^{74} + \cdots + 16.9775u + 2.81951 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.415891u^{75} - 1.22824u^{74} + \cdots + 39.3057u + 7.95504 \\ -0.194023u^{75} - 0.546355u^{74} + \cdots + 17.3170u + 2.53108 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -0.0622434u^{75} - 0.0455723u^{74} + \cdots - 33.2165u - 8.05740 \\ -0.0439022u^{75} - 0.116446u^{74} + \cdots + 1.87201u + 1.57885 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.651878u^{75} + 1.92544u^{74} + \cdots - 51.0468u - 2.30852 \\ -0.0179655u^{75} - 0.0546002u^{74} + \cdots + 3.42243u + 2.09091 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.0294076u^{75} + 0.0381562u^{74} + \cdots - 28.1824u - 9.55530 \\ 0.0110664u^{75} + 0.0327171u^{74} + \cdots - 4.90611u - 0.0809515 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.317501u^{75} - 0.942464u^{74} + \cdots + 28.4231u + 3.04039 \\ 0.0616004u^{75} + 0.175235u^{74} + \cdots - 5.56085u - 2.01059 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.299536u^{75} - 0.887864u^{74} + \cdots + 25.0007u + 0.949486 \\ 0.0645846u^{75} + 0.181799u^{74} + \cdots - 5.38898u - 2.00496 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.442676u^{75} - 1.15751u^{74} + \cdots + 2.36444u - 4.96056 \\ -0.0699751u^{75} - 0.183763u^{74} + \cdots + 4.34691u + 0.572363 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.982921u^{75} + 2.54015u^{74} + \cdots - 83.5290u - 1.53183$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{76}+5u^{75}+\cdots+14139u+307$
c_2	$u^{76}+16u^{74}+\cdots-417u+9$
c_3	$u^{76}-3u^{75}+\cdots+40u-8$
c_4	$u^{76}+25u^{74}+\cdots-40832u-9472$
c_5, c_{11}	$u^{76}+21u^{74}+\cdots-7422u-4041$
c_6	$u^{76}+5u^{75}+\cdots-14u+1$
c_7	$u^{76}+u^{75}+\cdots+280u-19$
c_8, c_9, c_{12}	$u^{76}-32u^{74}+\cdots-141u+19$
c_{10}	$u^{76}-4u^{75}+\cdots+100u-1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{76} - 57y^{75} + \cdots - 374836851y + 94249$
c_2	$y^{76} + 32y^{75} + \cdots - 151605y + 81$
c_3	$y^{76} + 13y^{75} + \cdots + 1568y + 64$
c_4	$y^{76} + 50y^{75} + \cdots + 4136583168y + 89718784$
c_5, c_{11}	$y^{76} + 42y^{75} + \cdots + 335290680y + 16329681$
c_6	$y^{76} + 9y^{75} + \cdots - 22y + 1$
c_7	$y^{76} + 17y^{75} + \cdots - 28924y + 361$
c_8, c_9, c_{12}	$y^{76} - 64y^{75} + \cdots + 5199y + 361$
c_{10}	$y^{76} + 10y^{75} + \cdots - 8956y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.988673+0.157879I$ $a=\ \ 0.210479-0.611484I$ $b=-0.77585+1.64641I$	$0.29226+5.94254I$	0
$u=-0.988673-0.157879I$ $a=\ \ 0.210479+0.611484I$ $b=-0.77585-1.64641I$	$0.29226-5.94254I$	0
$u=-0.856136+0.519729I$ $a=\ \ 0.138708+0.873657I$ $b=-0.09153-1.49560I$	$0.21542+4.69032I$	0
$u=-0.856136-0.519729I$ $a=\ \ 0.138708-0.873657I$ $b=-0.09153+1.49560I$	$0.21542-4.69032I$	0
$u=-0.791352+0.617036I$ $a=\ \ 0.037093+1.016310I$ $b=\ \ 0.642295-1.104590I$	$0.55399+4.14989I$	0
$u=-0.791352-0.617036I$ $a=\ \ 0.037093-1.016310I$ $b=\ \ 0.642295+1.104590I$	$0.55399-4.14989I$	0
$u=\ \ 0.274686+0.996744I$ $a=-0.488851-0.812735I$ $b=-0.457165+0.633310I$	$6.38323-2.69065I$	0
$u=\ \ 0.274686-0.996744I$ $a=-0.488851+0.812735I$ $b=-0.457165-0.633310I$	$6.38323+2.69065I$	0
$u=-0.836004+0.659794I$ $a=\ \ 0.06104-1.56008I$ $b=-0.880984+0.616441I$	$-6.58488+4.99744I$	0
$u=-0.836004-0.659794I$ $a=\ \ 0.06104+1.56008I$ $b=-0.880984-0.616441I$	$-6.58488-4.99744I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.347092+0.856959I$ $a=1.28732+1.16537I$ $b=0.451088-0.953532I$	$3.58206+8.75485I$	$8.32937-7.77105I$
$u=-0.347092-0.856959I$ $a=1.28732-1.16537I$ $b=0.451088+0.953532I$	$3.58206-8.75485I$	$8.32937+7.77105I$
$u=0.878556+0.200637I$ $a=0.238847-0.740853I$ $b=-0.40970+1.78620I$	$-3.57909+0.60336I$	$-2.63945+2.67457I$
$u=0.878556-0.200637I$ $a=0.238847+0.740853I$ $b=-0.40970-1.78620I$	$-3.57909-0.60336I$	$-2.63945-2.67457I$
$u=0.699124+0.554855I$ $a=0.15882+1.84694I$ $b=-0.853372-0.594063I$	$-2.66450+0.00138I$	$0.99118+2.31235I$
$u=0.699124-0.554855I$ $a=0.15882-1.84694I$ $b=-0.853372+0.594063I$	$-2.66450-0.00138I$	$0.99118-2.31235I$
$u=0.644694+0.906666I$ $a=-0.091006-1.240470I$ $b=1.00187+1.51947I$	$9.65535-5.48513I$	0
$u=0.644694-0.906666I$ $a=-0.091006+1.240470I$ $b=1.00187-1.51947I$	$9.65535+5.48513I$	0
$u=0.394933+0.781994I$ $a=1.36967-1.13329I$ $b=0.361605+0.847407I$	$-1.42075-4.05339I$	$4.25074+6.84714I$
$u=0.394933-0.781994I$ $a=1.36967+1.13329I$ $b=0.361605-0.847407I$	$-1.42075+4.05339I$	$4.25074-6.84714I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.723650 + 0.459547I$ $a = 0.035116 - 0.774350I$ $b = 0.655940 + 0.546441I$	$-1.18749 - 1.04073I$	$-2.87515 + 1.88476I$
$u = 0.723650 - 0.459547I$ $a = 0.035116 + 0.774350I$ $b = 0.655940 - 0.546441I$	$-1.18749 + 1.04073I$	$-2.87515 - 1.88476I$
$u = 0.802133 + 0.883320I$ $a = -0.451106 - 0.482056I$ $b = -0.418768 - 0.183701I$	$6.65595 - 3.01746I$	0
$u = 0.802133 - 0.883320I$ $a = -0.451106 + 0.482056I$ $b = -0.418768 + 0.183701I$	$6.65595 + 3.01746I$	0
$u = 0.925583 + 0.764929I$ $a = 0.027137 + 1.376180I$ $b = -0.895559 - 0.641011I$	$-2.50803 - 9.92376I$	0
$u = 0.925583 - 0.764929I$ $a = 0.027137 - 1.376180I$ $b = -0.895559 + 0.641011I$	$-2.50803 + 9.92376I$	0
$u = -0.464123 + 0.622645I$ $a = 1.42148 + 1.07836I$ $b = 0.249050 - 0.626220I$	$1.25423 - 0.69104I$	$7.01445 - 3.43740I$
$u = -0.464123 - 0.622645I$ $a = 1.42148 - 1.07836I$ $b = 0.249050 + 0.626220I$	$1.25423 + 0.69104I$	$7.01445 + 3.43740I$
$u = -1.24798$ $a = 0.00845205$ $b = 0.614730$	2.40053	0
$u = -0.245836 + 0.608610I$ $a = -1.01333 + 1.76814I$ $b = -0.189251 - 0.380413I$	$1.92153 + 0.94962I$	$-2.98543 - 0.44875I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.245836-0.608610I$ $a=-1.01333-1.76814I$ $b=-0.189251+0.380413I$	$1.92153-0.94962I$	$-2.98543+0.44875I$
$u=\ 0.079389+0.643195I$ $a=\ 1.88748-1.54979I$ $b=-0.427883+0.986505I$	$9.02338+2.28669I$	$0.66173+6.35182I$
$u=\ 0.079389-0.643195I$ $a=\ 1.88748+1.54979I$ $b=-0.427883-0.986505I$	$9.02338-2.28669I$	$0.66173-6.35182I$
$u=\ 0.659231+1.237980I$ $a=-0.029277+0.560989I$ $b=-0.983298-0.893974I$	$8.19481-3.33586I$	0
$u=\ 0.659231-1.237980I$ $a=-0.029277-0.560989I$ $b=-0.983298+0.893974I$	$8.19481+3.33586I$	0
$u=-0.98850+1.01710I$ $a=-0.138103+0.999293I$ $b=\ 1.06198-1.21767I$	$-0.46066+6.48918I$	0
$u=-0.98850-1.01710I$ $a=-0.138103-0.999293I$ $b=\ 1.06198+1.21767I$	$-0.46066-6.48918I$	0
$u=-0.328939+0.463886I$ $a=\ 1.55302+0.64027I$ $b=-0.053887-0.497588I$	$1.328470-0.474798I$	$6.36942-0.30577I$
$u=-0.328939-0.463886I$ $a=\ 1.55302-0.64027I$ $b=-0.053887+0.497588I$	$1.328470+0.474798I$	$6.36942+0.30577I$
$u=\ 0.534569+0.150336I$ $a=-0.376119-1.361820I$ $b=\ 1.31070+0.63115I$	$-2.20215-2.11422I$	$-3.95825+2.02066I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.534569 - 0.150336I$ $a = -0.376119 + 1.361820I$ $b = 1.31070 - 0.63115I$	$-2.20215 + 2.11422I$	$-3.95825 - 2.02066I$
$u = 0.526151$ $a = 4.68059$ $b = 0.222446$	3.74373	-111.560
$u = -0.97016 + 1.10954I$ $a = 0.091135 - 0.575325I$ $b = -0.885716 + 1.032580I$	$3.43380 + 4.26674I$	0
$u = -0.97016 - 1.10954I$ $a = 0.091135 + 0.575325I$ $b = -0.885716 - 1.032580I$	$3.43380 - 4.26674I$	0
$u = -0.281385 + 0.377115I$ $a = -1.73924 + 1.56042I$ $b = -0.465609 + 0.236668I$	$1.70817 + 1.12824I$	$3.87173 - 6.48533I$
$u = -0.281385 - 0.377115I$ $a = -1.73924 - 1.56042I$ $b = -0.465609 - 0.236668I$	$1.70817 - 1.12824I$	$3.87173 + 6.48533I$
$u = 0.130457 + 0.443544I$ $a = 0.83864 + 1.48325I$ $b = 1.53456 - 1.51852I$	$1.75853 - 7.50443I$	$7.50202 + 11.32011I$
$u = 0.130457 - 0.443544I$ $a = 0.83864 - 1.48325I$ $b = 1.53456 + 1.51852I$	$1.75853 + 7.50443I$	$7.50202 - 11.32011I$
$u = -0.43167 + 1.47701I$ $a = -0.497084 - 0.041859I$ $b = 1.065130 + 0.173695I$	$-4.34097 + 0.35523I$	0
$u = -0.43167 - 1.47701I$ $a = -0.497084 + 0.041859I$ $b = 1.065130 - 0.173695I$	$-4.34097 - 0.35523I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.03967 + 1.15434I$ $a = -0.175674 - 0.949551I$ $b = 1.10780 + 1.18726I$	$-3.18134 - 11.88140I$	0
$u = 1.03967 - 1.15434I$ $a = -0.175674 + 0.949551I$ $b = 1.10780 - 1.18726I$	$-3.18134 + 11.88140I$	0
$u = -1.07256 + 1.16076I$ $a = 0.518563 - 0.163208I$ $b = -0.354403 - 0.325175I$	$-0.346472 + 1.021960I$	0
$u = -1.07256 - 1.16076I$ $a = 0.518563 + 0.163208I$ $b = -0.354403 + 0.325175I$	$-0.346472 - 1.021960I$	0
$u = -0.065520 + 0.389048I$ $a = -3.90518 + 0.23427I$ $b = -0.663122 - 0.134399I$	$3.88542 + 0.95380I$	$-0.53894 + 3.77835I$
$u = -0.065520 - 0.389048I$ $a = -3.90518 - 0.23427I$ $b = -0.663122 + 0.134399I$	$3.88542 - 0.95380I$	$-0.53894 - 3.77835I$
$u = 0.91249 + 1.33131I$ $a = 0.152639 + 0.727902I$ $b = -0.806727 - 0.838803I$	$2.28311 - 5.16223I$	0
$u = 0.91249 - 1.33131I$ $a = 0.152639 - 0.727902I$ $b = -0.806727 + 0.838803I$	$2.28311 + 5.16223I$	0
$u = 0.18899 + 1.60874I$ $a = -0.579596 + 0.139074I$ $b = 1.208120 - 0.259339I$	$0.43258 - 3.98462I$	0
$u = 0.18899 - 1.60874I$ $a = -0.579596 - 0.139074I$ $b = 1.208120 + 0.259339I$	$0.43258 + 3.98462I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.03600+1.25835I$ $a=-0.207314+0.919011I$ $b=\ \ 1.13468-1.16952I$	$1.8826+16.8363I$	0
$u=-1.03600-1.25835I$ $a=-0.207314-0.919011I$ $b=\ \ 1.13468+1.16952I$	$1.8826-16.8363I$	0
$u=-0.95108+1.32857I$ $a=\ \ 0.036047-0.766370I$ $b=-0.884370+0.831483I$	$6.15358+7.92208I$	0
$u=-0.95108-1.32857I$ $a=\ \ 0.036047+0.766370I$ $b=-0.884370-0.831483I$	$6.15358-7.92208I$	0
$u=\ \ 0.82591+1.43030I$ $a=-0.368712-0.006518I$ $b=\ \ 0.909492-0.149096I$	$-0.90960+3.32063I$	0
$u=\ \ 0.82591-1.43030I$ $a=-0.368712+0.006518I$ $b=\ \ 0.909492+0.149096I$	$-0.90960-3.32063I$	0
$u=-0.196925+0.198557I$ $a=\ \ 0.87584-2.14816I$ $b=\ \ 1.92387+1.05055I$	$-3.96027+2.48444I$	$-5.35559-12.59159I$
$u=-0.196925-0.198557I$ $a=\ \ 0.87584+2.14816I$ $b=\ \ 1.92387-1.05055I$	$-3.96027-2.48444I$	$-5.35559+12.59159I$
$u=\ \ 1.27946+1.20751I$ $a=\ \ 0.135069+0.566822I$ $b=-0.726578-1.080900I$	$6.23257-5.85237I$	0
$u=\ \ 1.27946-1.20751I$ $a=\ \ 0.135069-0.566822I$ $b=-0.726578+1.080900I$	$6.23257+5.85237I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.94793+1.50677I$ $a=\ \ 0.230301-0.619665I$ $b=-0.682958+0.866149I$	$5.82633+2.70104I$	0
$u=-0.94793-1.50677I$ $a=\ \ 0.230301+0.619665I$ $b=-0.682958-0.866149I$	$5.82633-2.70104I$	0
$u=\ \ 1.50227+0.97016I$ $a=\ \ 0.381804+0.242487I$ $b=-0.322820+0.301588I$	$-4.02902+3.33307I$	0
$u=\ \ 1.50227-0.97016I$ $a=\ \ 0.381804-0.242487I$ $b=-0.322820-0.301588I$	$-4.02902-3.33307I$	0
$u=-1.83497+0.74700I$ $a=\ \ 0.279823-0.271827I$ $b=-0.307214-0.279280I$	$0.17127-7.70833I$	0
$u=-1.83497-0.74700I$ $a=\ \ 0.279823+0.271827I$ $b=-0.307214+0.279280I$	$0.17127+7.70833I$	0

II.

$\boldsymbol{I_2^u = \langle -6.04\times 10^6 u^{16} + 5.00\times 10^6 u^{15} + \cdots + 1.00\times 10^7 b - 9.92\times 10^6,\ 1.26\times 10^6 u^{16} - 2.09\times 10^7 u^{15} + \cdots + 1.00\times 10^7 a + 5.03\times 10^7,\ u^{17} + 3u^{15} + \cdots + u - 1\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

$$a_7 = \begin{pmatrix} -0.125930u^{16} + 2.08959u^{15} + \cdots + 10.3993u - 5.02712 \\ 0.604252u^{16} - 0.499872u^{15} + \cdots - 2.52114u + 0.992256 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.138953u^{16} + 1.97910u^{15} + \cdots + 10.0937u - 6.12445 \\ 0.331276u^{16} - 0.372219u^{15} + \cdots - 2.14577u + 0.881767 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.478322u^{16} + 1.58972u^{15} + \cdots + 7.87816u - 4.03486 \\ 0.604252u^{16} - 0.499872u^{15} + \cdots - 2.52114u + 0.992256 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 2.93753u^{16} - 0.213439u^{15} + \cdots - 8.94162u - 5.24626 \\ -1.08959u^{16} - 0.339369u^{15} + \cdots + 0.901190u + 1.12593 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 6.72458u^{16} - 0.347814u^{15} + \cdots - 15.9518u + 7.15302 \\ -0.0964454u^{16} + 0.0683699u^{15} + \cdots + 1.11139u - 0.589717 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 5.12838u^{16} + 0.385878u^{15} + \cdots - 9.07212u - 7.23639 \\ -1.10126u^{16} - 0.259949u^{15} + \cdots + 1.22931u + 0.864200 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1.44840u^{16} - 0.264495u^{15} + \cdots + 4.16177u - 1.79318 \\ 0.915875u^{16} + 0.244253u^{15} + \cdots - 2.29530u + 0.325222 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -1.35195u^{16} - 0.332865u^{15} + \cdots + 3.05037u - 1.20347 \\ 0.981428u^{16} + 0.333098u^{15} + \cdots - 2.13048u + 0.256852 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.0890174u^{16} - 0.254122u^{15} + \cdots + 1.05583u - 5.67538 \\ 0.942381u^{16} + 0.210599u^{15} + \cdots - 2.25734u + 0.290593 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{23991057}{9996367}u^{16} + \frac{18751596}{9996367}u^{15} + \cdots + \frac{16790502}{9996367}u + \frac{371933198}{9996367}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} - 8u^{16} + \cdots - 7u + 1$
c_2	$u^{17} - u^{16} + \cdots + 85u - 11$
c_3	$u^{17} + 3u^{15} + \cdots + u - 1$
c_4	$u^{17} - u^{16} + \cdots - u - 1$
c_5	$u^{17} - u^{16} + \cdots - 8u - 5$
c_6	$u^{17} + 3u^{15} + \cdots + 6u + 1$
c_7	$u^{17} + 4u^{16} + \cdots + 6u - 5$
c_8, c_9	$u^{17} - u^{16} + \cdots - 3u + 1$
c_{10}	$u^{17} + 3u^{16} + \cdots + 3u^2 + 1$
c_{11}	$u^{17} + u^{16} + \cdots - 8u + 5$
c_{12}	$u^{17} + u^{16} + \cdots - 3u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} - 14y^{15} + \cdots + 5y - 1$
c_2	$y^{17} + 9y^{16} + \cdots + 2407y - 121$
c_3	$y^{17} + 6y^{16} + \cdots - 9y - 1$
c_4	$y^{17} - y^{16} + \cdots + 15y - 1$
c_5, c_{11}	$y^{17} + 11y^{16} + \cdots - 186y - 25$
c_6	$y^{17} + 6y^{16} + \cdots + 20y - 1$
c_7	$y^{17} + 6y^{16} + \cdots + 46y - 25$
c_8, c_9, c_{12}	$y^{17} - 19y^{16} + \cdots + 23y - 1$
c_{10}	$y^{17} - y^{16} + \cdots - 6y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.972003 + 0.212018I$ $a = -0.488289 - 0.271559I$ $b = 0.336060 + 1.308020I$	$1.01866 + 6.81301I$	$4.54269 - 5.97212I$
$u = 0.972003 - 0.212018I$ $a = -0.488289 + 0.271559I$ $b = 0.336060 - 1.308020I$	$1.01866 - 6.81301I$	$4.54269 + 5.97212I$
$u = 0.192968 + 1.105900I$ $a = -0.631721 + 0.168013I$ $b = 0.883233 + 0.254108I$	$-0.82435 - 2.10930I$	$2.15224 + 0.70653I$
$u = 0.192968 - 1.105900I$ $a = -0.631721 - 0.168013I$ $b = 0.883233 - 0.254108I$	$-0.82435 + 2.10930I$	$2.15224 - 0.70653I$
$u = -0.506977 + 0.637369I$ $a = -0.605526 + 0.069770I$ $b = 1.09502 - 0.93131I$	$-3.76213 - 1.93723I$	$0.705082 + 0.084395I$
$u = -0.506977 - 0.637369I$ $a = -0.605526 - 0.069770I$ $b = 1.09502 + 0.93131I$	$-3.76213 + 1.93723I$	$0.705082 - 0.084395I$
$u = -0.637103 + 1.057460I$ $a = 0.126961 - 1.026520I$ $b = -1.02655 + 1.38119I$	$10.56410 + 5.07740I$	$12.18176 - 3.44506I$
$u = -0.637103 - 1.057460I$ $a = 0.126961 + 1.026520I$ $b = -1.02655 - 1.38119I$	$10.56410 - 5.07740I$	$12.18176 + 3.44506I$
$u = 0.030058 + 0.707978I$ $a = -1.63369 - 1.72427I$ $b = 0.275529 + 0.997923I$	$9.31524 - 2.53943I$	$17.0890 + 7.0986I$
$u = 0.030058 - 0.707978I$ $a = -1.63369 + 1.72427I$ $b = 0.275529 - 0.997923I$	$9.31524 + 2.53943I$	$17.0890 - 7.0986I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ 0.632350$ $a = \ 3.11676$ $b = \ 0.186461$	3.79508	54.1520
$u = -0.114173 + 0.525642I$ $a = -2.08531 + 2.37442I$ $b = -0.061878 - 0.492319I$	$2.27870 + 0.92922I$	$21.3078 + 0.7119I$
$u = -0.114173 - 0.525642I$ $a = -2.08531 - 2.37442I$ $b = -0.061878 + 0.492319I$	$2.27870 - 0.92922I$	$21.3078 - 0.7119I$
$u = \ 0.95698 + 1.17980I$ $a = \ 0.103371 + 0.669932I$ $b = -0.831065 - 1.058980I$	$3.84695 - 4.69977I$	$8.87800 + 7.79886I$
$u = \ 0.95698 - 1.17980I$ $a = \ 0.103371 - 0.669932I$ $b = -0.831065 + 1.058980I$	$3.84695 + 4.69977I$	$8.87800 - 7.79886I$
$u = -1.20993 + 1.50887I$ $a = \ 0.155831 - 0.457656I$ $b = -0.763587 + 0.778846I$	$6.91907 + 4.78852I$	$9.06731 - 5.35952I$
$u = -1.20993 - 1.50887I$ $a = \ 0.155831 + 0.457656I$ $b = -0.763587 - 0.778846I$	$6.91907 - 4.78852I$	$9.06731 + 5.35952I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17}-8u^{16}+\cdots-7u+1)(u^{76}+5u^{75}+\cdots+14139u+307)$
c_2	$(u^{17}-u^{16}+\cdots+85u-11)(u^{76}+16u^{74}+\cdots-417u+9)$
c_3	$(u^{17}+3u^{15}+\cdots+u-1)(u^{76}-3u^{75}+\cdots+40u-8)$
c_4	$(u^{17}-u^{16}+\cdots-u-1)(u^{76}+25u^{74}+\cdots-40832u-9472)$
c_5	$(u^{17}-u^{16}+\cdots-8u-5)(u^{76}+21u^{74}+\cdots-7422u-4041)$
c_6	$(u^{17}+3u^{15}+\cdots+6u+1)(u^{76}+5u^{75}+\cdots-14u+1)$
c_7	$(u^{17}+4u^{16}+\cdots+6u-5)(u^{76}+u^{75}+\cdots+280u-19)$
c_8, c_9	$(u^{17}-u^{16}+\cdots-3u+1)(u^{76}-32u^{74}+\cdots-141u+19)$
c_{10}	$(u^{17}+3u^{16}+\cdots+3u^2+1)(u^{76}-4u^{75}+\cdots+100u-1)$
c_{11}	$(u^{17}+u^{16}+\cdots-8u+5)(u^{76}+21u^{74}+\cdots-7422u-4041)$
c_{12}	$(u^{17}+u^{16}+\cdots-3u-1)(u^{76}-32u^{74}+\cdots-141u+19)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{17} - 14y^{15} + \cdots + 5y - 1)$ $\cdot (y^{76} - 57y^{75} + \cdots - 374836851y + 94249)$
c_2	$(y^{17} + 9y^{16} + \cdots + 2407y - 121)(y^{76} + 32y^{75} + \cdots - 151605y + 81)$
c_3	$(y^{17} + 6y^{16} + \cdots - 9y - 1)(y^{76} + 13y^{75} + \cdots + 1568y + 64)$
c_4	$(y^{17} - y^{16} + \cdots + 15y - 1)$ $\cdot (y^{76} + 50y^{75} + \cdots + 4136583168y + 89718784)$
c_5, c_{11}	$(y^{17} + 11y^{16} + \cdots - 186y - 25)$ $\cdot (y^{76} + 42y^{75} + \cdots + 335290680y + 16329681)$
c_6	$(y^{17} + 6y^{16} + \cdots + 20y - 1)(y^{76} + 9y^{75} + \cdots - 22y + 1)$
c_7	$(y^{17} + 6y^{16} + \cdots + 46y - 25)(y^{76} + 17y^{75} + \cdots - 28924y + 361)$
c_8, c_9, c_{12}	$(y^{17} - 19y^{16} + \cdots + 23y - 1)(y^{76} - 64y^{75} + \cdots + 5199y + 361)$
c_{10}	$(y^{17} - y^{16} + \cdots - 6y - 1)(y^{76} + 10y^{75} + \cdots - 8956y + 1)$