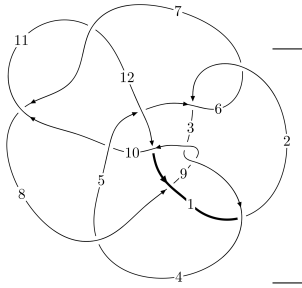
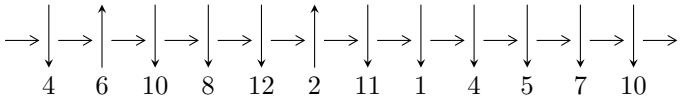
$12n_{0766}$ $(K12n_{0766})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 4.30257 \times 10^{223} u^{73} - 1.59534 \times 10^{224} u^{72} + \cdots + 3.52832 \times 10^{224} b - 2.38648 \times 10^{226}, \\ & - 1.18385 \times 10^{227} u^{73} + 4.85389 \times 10^{227} u^{72} + \cdots + 1.03768 \times 10^{228} a + 1.60594 \times 10^{229}, \\ & 2u^{74} - 7u^{73} + \cdots - 16845u - 2941 \rangle \\ I_2^u = \langle & -3.25053 \times 10^{21} u^{25} - 6.44125 \times 10^{21} u^{24} + \cdots + 2.54323 \times 10^{21} b - 7.68603 \times 10^{21}, \\ & 4.00630 \times 10^{22} u^{25} + 4.85877 \times 10^{22} u^{24} + \cdots + 1.27162 \times 10^{22} a - 9.79215 \times 10^{22}, \ 2u^{26} + 3u^{25} + \cdots + 3u + \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 100 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. $\boldsymbol{I_1^u = \langle 4.30 \times 10^{223} u^{73} - 1.60 \times 10^{224} u^{72} + \cdots + 3.53 \times 10^{224} b - 2.39 \times 10^{226},\ -1.18 \times 10^{227} u^{73} + 4.85 \times 10^{227} u^{72} + \cdots + 1.04 \times 10^{228} a + 1.61 \times 10^{229},\ 2u^{74} - 7u^{73} + \cdots - 16845u - 2941 \rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

$$a_5 = \begin{pmatrix} 0.114087u^{73} - 0.467764u^{72} + \cdots - 245.040u - 15.4763 \\ -0.121944u^{73} + 0.452153u^{72} + \cdots + 532.776u + 67.6377 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.0868585u^{73} - 0.413586u^{72} + \cdots + 129.619u + 47.9189 \\ -0.0947156u^{73} + 0.397975u^{72} + \cdots + 158.117u + 4.24257 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 0.0617274u^{73} - 0.381249u^{72} + \cdots + 696.582u + 152.833 \\ -0.0171680u^{73} + 0.135545u^{72} + \cdots - 359.031u - 74.6220 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.312963u^{73} + 0.836273u^{72} + \cdots + 3468.82u + 582.248 \\ 0.351363u^{73} - 0.929137u^{72} + \cdots - 4120.61u - 695.633 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.286378u^{73} - 1.50591u^{72} + \cdots + 2610.83u + 594.370 \\ -0.182080u^{73} + 1.24961u^{72} + \cdots - 3728.07u - 779.031 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.665053u^{73} - 3.07468u^{72} + \cdots + 1842.56u + 551.877 \\ -0.448541u^{73} + 2.43442u^{72} + \cdots - 3955.59u - 895.987 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.275851u^{73} - 1.31333u^{72} + \cdots + 1415.83u + 352.827 \\ -0.132560u^{73} + 0.746912u^{72} + \cdots - 1432.05u - 319.676 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.530006u^{73} + 1.62015u^{72} + \cdots + 4466.85u + 715.631 \\ 0.503235u^{73} - 1.26199u^{72} + \cdots - 6391.55u - 1090.11 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 0.310330u^{73} - 0.873656u^{72} + \cdots - 3442.04u - 587.923$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$2(2u^{74} - 3u^{73} + \cdots + 5635u + 1357)$
c_2, c_6	$u^{74} - 2u^{73} + \cdots - 215u + 91$
c_3, c_9	$2(2u^{74} + 5u^{73} + \cdots + 1357162u - 1267391)$
c_4	$u^{74} + 2u^{73} + \cdots - 15076u + 11221$
c_5	$u^{74} + u^{73} + \cdots + 15239u - 3254$
c_7, c_{11}	$2(2u^{74} + 7u^{73} + \cdots + 16845u - 2941)$
c_8	$u^{74} + u^{73} + \cdots - 327620u - 108299$
c_{10}	$u^{74} + u^{73} + \cdots - 2955u - 682$
c_{12}	$4(4u^{74} - 55u^{73} + \cdots - 5042508u + 189693)$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$4(4y^{74} - 365y^{73} + \cdots - 4.76298 \times 10^8 y + 1841449)$
c_2, c_6	$y^{74} + 44y^{73} + \cdots + 374559y + 8281$
c_3, c_9	$4(4y^{74} - 385y^{73} + \cdots - 1.71162 \times 10^{13} y + 1.60628 \times 10^{12})$
c_4	$y^{74} + 42y^{73} + \cdots + 674142038y + 125910841$
c_5	$y^{74} - 23y^{73} + \cdots - 131821697y + 10588516$
c_7, c_{11}	$4(4y^{74} + 223y^{73} + \cdots + 5.75137 \times 10^7 y + 8649481)$
c_8	$y^{74} - 73y^{73} + \cdots - 102167052718y + 11728673401$
c_{10}	$y^{74} + 27y^{73} + \cdots + 11416983y + 465124$
c_{12}	$16(16y^{74} - 1361y^{73} + \cdots - 3.95388 \times 10^{12} y + 3.59834 \times 10^{10})$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.282540+0.965432I$ $a=\ \ 1.97958-0.61451I$ $b=-2.36679+0.10892I$	$5.94493+1.20153I$	0
$u=-0.282540-0.965432I$ $a=\ \ 1.97958+0.61451I$ $b=-2.36679-0.10892I$	$5.94493-1.20153I$	0
$u=-0.273716+0.955237I$ $a=\ \ 0.964437+0.589339I$ $b=-1.65206-1.31053I$	$-4.12089+2.31752I$	0
$u=-0.273716-0.955237I$ $a=\ \ 0.964437-0.589339I$ $b=-1.65206+1.31053I$	$-4.12089-2.31752I$	0
$u=\ \ 0.850496+0.543632I$ $a=\ \ 0.560041-0.577085I$ $b=\ \ 0.286399+0.141759I$	$-3.21620-2.62127I$	0
$u=\ \ 0.850496-0.543632I$ $a=\ \ 0.560041+0.577085I$ $b=\ \ 0.286399-0.141759I$	$-3.21620+2.62127I$	0
$u=\ \ 0.129802+0.975847I$ $a=-0.906793-0.098111I$ $b=\ \ 1.82693-1.49863I$	$1.63235-1.32777I$	0
$u=\ \ 0.129802-0.975847I$ $a=-0.906793+0.098111I$ $b=\ \ 1.82693+1.49863I$	$1.63235+1.32777I$	0
$u=\ \ 0.227538+0.989919I$ $a=-0.949692+0.421748I$ $b=\ \ 1.44010+0.70533I$	$-0.40348-4.84228I$	0
$u=\ \ 0.227538-0.989919I$ $a=-0.949692-0.421748I$ $b=\ \ 1.44010-0.70533I$	$-0.40348+4.84228I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.451986 + 0.911224I$ $a = -0.986328 + 0.186176I$ $b = 1.36894 - 0.72134I$	$-1.94739 - 2.05739I$	0
$u = 0.451986 - 0.911224I$ $a = -0.986328 - 0.186176I$ $b = 1.36894 + 0.72134I$	$-1.94739 + 2.05739I$	0
$u = -0.882267 + 0.418072I$ $a = 0.794732 + 0.966645I$ $b = 0.102572 + 0.568615I$	$-11.22430 - 3.31101I$	0
$u = -0.882267 - 0.418072I$ $a = 0.794732 - 0.966645I$ $b = 0.102572 - 0.568615I$	$-11.22430 + 3.31101I$	0
$u = -0.326030 + 1.001260I$ $a = 1.78729 - 0.35964I$ $b = -2.07467 + 0.41391I$	$8.32262 + 1.34742I$	0
$u = -0.326030 - 1.001260I$ $a = 1.78729 + 0.35964I$ $b = -2.07467 - 0.41391I$	$8.32262 - 1.34742I$	0
$u = 0.112227 + 0.923316I$ $a = -0.552088 - 1.134390I$ $b = 0.487672 - 0.685782I$	$1.41563 + 0.22117I$	$-8.00000 + 0.I$
$u = 0.112227 - 0.923316I$ $a = -0.552088 + 1.134390I$ $b = 0.487672 + 0.685782I$	$1.41563 - 0.22117I$	$-8.00000 + 0.I$
$u = 0.819659 + 0.410089I$ $a = -0.311016 + 1.351220I$ $b = -0.577110 - 0.608864I$	$-3.45418 + 3.81432I$	$-8.00000 - 3.44974I$
$u = 0.819659 - 0.410089I$ $a = -0.311016 - 1.351220I$ $b = -0.577110 + 0.608864I$	$-3.45418 - 3.81432I$	$-8.00000 + 3.44974I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.884708 + 0.626615I$ $a = -1.022130 - 0.689132I$ $b = 1.252530 - 0.402107I$	$-8.51884 - 2.65252I$	0
$u = 0.884708 - 0.626615I$ $a = -1.022130 + 0.689132I$ $b = 1.252530 + 0.402107I$	$-8.51884 + 2.65252I$	0
$u = -0.843390 + 0.327145I$ $a = 0.313849 + 1.164510I$ $b = 0.515054 - 0.008704I$	$-1.78911 - 2.87710I$	$-11.42016 + 4.01103I$
$u = -0.843390 - 0.327145I$ $a = 0.313849 - 1.164510I$ $b = 0.515054 + 0.008704I$	$-1.78911 + 2.87710I$	$-11.42016 - 4.01103I$
$u = 0.932065 + 0.593886I$ $a = -0.359516 - 0.399971I$ $b = -0.016925 + 0.207404I$	$-1.16017 + 1.30316I$	0
$u = 0.932065 - 0.593886I$ $a = -0.359516 + 0.399971I$ $b = -0.016925 - 0.207404I$	$-1.16017 - 1.30316I$	0
$u = -0.248102 + 1.112950I$ $a = 0.348133 + 0.638683I$ $b = -0.168692 + 0.673985I$	$2.02889 + 4.36880I$	0
$u = -0.248102 - 1.112950I$ $a = 0.348133 - 0.638683I$ $b = -0.168692 - 0.673985I$	$2.02889 - 4.36880I$	0
$u = -0.296484 + 1.119460I$ $a = -0.42766 + 1.64773I$ $b = 1.195140 - 0.619228I$	$-6.67297 + 7.19206I$	0
$u = -0.296484 - 1.119460I$ $a = -0.42766 - 1.64773I$ $b = 1.195140 + 0.619228I$	$-6.67297 - 7.19206I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.139612+1.164800I$ $a=-0.503559+0.439878I$ $b=\ \ 1.40916+0.71610I$	$2.38650+3.81134I$	0
$u=-0.139612-1.164800I$ $a=-0.503559-0.439878I$ $b=\ \ 1.40916-0.71610I$	$2.38650-3.81134I$	0
$u=-0.085205+0.815728I$ $a=\ \ 0.10305-2.33544I$ $b=-0.104807+0.812551I$	$-5.12415-0.44406I$	$-5.45474-1.65343I$
$u=-0.085205-0.815728I$ $a=\ \ 0.10305+2.33544I$ $b=-0.104807-0.812551I$	$-5.12415+0.44406I$	$-5.45474+1.65343I$
$u=-0.480089+1.115540I$ $a=-0.721167-0.211751I$ $b=\ \ 2.27508+1.18426I$	$-9.01588+8.24429I$	0
$u=-0.480089-1.115540I$ $a=-0.721167+0.211751I$ $b=\ \ 2.27508-1.18426I$	$-9.01588-8.24429I$	0
$u=-0.037495+1.218510I$ $a=\ \ 0.588125-0.286537I$ $b=-1.72908-0.14105I$	$3.51297-0.84853I$	0
$u=-0.037495-1.218510I$ $a=\ \ 0.588125+0.286537I$ $b=-1.72908+0.14105I$	$3.51297+0.84853I$	0
$u=-0.041616+1.282970I$ $a=\ \ 0.608968-0.136991I$ $b=-2.12837+0.42808I$	$3.82386-0.95845I$	0
$u=-0.041616-1.282970I$ $a=\ \ 0.608968+0.136991I$ $b=-2.12837-0.42808I$	$3.82386+0.95845I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.564418+0.431263I$ $a=-1.186740+0.350705I$ $b=\ \ 0.143898-0.524191I$	$2.33020+1.82399I$	$-2.62562-4.08720I$
$u=-0.564418-0.431263I$ $a=-1.186740-0.350705I$ $b=\ \ 0.143898+0.524191I$	$2.33020-1.82399I$	$-2.62562+4.08720I$
$u=\ \ 0.565832+1.189960I$ $a=\ \ 1.385630-0.142564I$ $b=-2.04227+0.69658I$	$-0.95117-9.06853I$	0
$u=\ \ 0.565832-1.189960I$ $a=\ \ 1.385630+0.142564I$ $b=-2.04227-0.69658I$	$-0.95117+9.06853I$	0
$u=-0.540516+1.218140I$ $a=-1.192520-0.017762I$ $b=\ \ 2.16082+0.66660I$	$1.05457+8.06406I$	0
$u=-0.540516-1.218140I$ $a=-1.192520+0.017762I$ $b=\ \ 2.16082-0.66660I$	$1.05457-8.06406I$	0
$u=\ \ 0.862645+1.082460I$ $a=-0.462609-0.839310I$ $b=\ \ 1.310950+0.310610I$	$-7.35921-3.79262I$	0
$u=\ \ 0.862645-1.082460I$ $a=-0.462609+0.839310I$ $b=\ \ 1.310950-0.310610I$	$-7.35921+3.79262I$	0
$u=-1.380710+0.230252I$ $a=\ \ 0.269437-0.278275I$ $b=\ \ 0.202962+0.463666I$	$-0.389474-0.354384I$	0
$u=-1.380710-0.230252I$ $a=\ \ 0.269437+0.278275I$ $b=\ \ 0.202962-0.463666I$	$-0.389474+0.354384I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.210951 + 1.392990I$ $a = 0.695783 - 0.339602I$ $b = -2.28329 - 0.58609I$	$-2.01031 - 5.75879I$	0
$u = 0.210951 - 1.392990I$ $a = 0.695783 + 0.339602I$ $b = -2.28329 + 0.58609I$	$-2.01031 + 5.75879I$	0
$u = 1.413210 + 0.032389I$ $a = 0.466955 - 0.622175I$ $b = 0.322562 - 0.042703I$	$-9.23639 + 9.54301I$	0
$u = 1.413210 - 0.032389I$ $a = 0.466955 + 0.622175I$ $b = 0.322562 + 0.042703I$	$-9.23639 - 9.54301I$	0
$u = -0.314553 + 0.484519I$ $a = -2.08380 + 0.18127I$ $b = 1.38082 + 1.62692I$	$-8.72504 - 4.53070I$	$-9.46563 - 0.03654I$
$u = -0.314553 - 0.484519I$ $a = -2.08380 - 0.18127I$ $b = 1.38082 - 1.62692I$	$-8.72504 + 4.53070I$	$-9.46563 + 0.03654I$
$u = 0.40349 + 1.40042I$ $a = 0.850562 - 0.225517I$ $b = -1.73948 + 0.45576I$	$4.66305 - 3.47646I$	0
$u = 0.40349 - 1.40042I$ $a = 0.850562 + 0.225517I$ $b = -1.73948 - 0.45576I$	$4.66305 + 3.47646I$	0
$u = -0.22989 + 1.46784I$ $a = 1.023780 + 0.634462I$ $b = -1.97633 - 0.61949I$	$8.50502 + 4.79512I$	0
$u = -0.22989 - 1.46784I$ $a = 1.023780 - 0.634462I$ $b = -1.97633 + 0.61949I$	$8.50502 - 4.79512I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.68098+1.32491I$ $a=-1.015860-0.099869I$ $b=\ \ 1.48438+0.51385I$	$3.51452+6.72221I$	0
$u=-0.68098-1.32491I$ $a=-1.015860+0.099869I$ $b=\ \ 1.48438-0.51385I$	$3.51452-6.72221I$	0
$u=\ \ 0.480013$ $a=-0.978637$ $b=\ \ 0.105834$	-0.717809	-13.7110
$u=-0.460554$ $a=-2.63177$ $b=\ \ 0.222685$	-6.45678	-18.2290
$u=\ \ 0.55731+1.44922I$ $a=-0.782460+0.229973I$ $b=\ \ 1.58134-0.58286I$	$3.10250-8.98573I$	0
$u=\ \ 0.55731-1.44922I$ $a=-0.782460-0.229973I$ $b=\ \ 1.58134+0.58286I$	$3.10250+8.98573I$	0
$u=\ \ 0.64625+1.43646I$ $a=-1.052510+0.238181I$ $b=\ \ 2.06068-0.85585I$	$-4.8082-16.5804I$	0
$u=\ \ 0.64625-1.43646I$ $a=-1.052510-0.238181I$ $b=\ \ 2.06068+0.85585I$	$-4.8082+16.5804I$	0
$u=-0.341097+0.196071I$ $a=-0.512603+0.829174I$ $b=\ \ 0.500629+0.652787I$	$-0.55991-1.68520I$	$-3.94366+2.95348I$
$u=-0.341097-0.196071I$ $a=-0.512603-0.829174I$ $b=\ \ 0.500629-0.652787I$	$-0.55991+1.68520I$	$-3.94366-2.95348I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.53573 + 1.88702I$ $a = -0.244801 + 0.238485I$ $b = 0.202955 - 0.369257I$	$-1.22442 + 0.74078I$	0
$u = 0.53573 - 1.88702I$ $a = -0.244801 - 0.238485I$ $b = 0.202955 + 0.369257I$	$-1.22442 - 0.74078I$	0
$u = 0.12508 + 2.04317I$ $a = 0.299929 - 0.278914I$ $b = -0.815962 + 0.338188I$	$-2.79671 + 1.13420I$	0
$u = 0.12508 - 2.04317I$ $a = 0.299929 + 0.278914I$ $b = -0.815962 - 0.338188I$	$-2.79671 - 1.13420I$	0

II. $I_2^u = \langle -3.25 \times 10^{21} u^{25} - 6.44 \times 10^{21} u^{24} + \cdots + 2.54 \times 10^{21} b - 7.69 \times 10^{21},\ 4.01 \times 10^{22} u^{25} + 4.86 \times 10^{22} u^{24} + \cdots + 1.27 \times 10^{22} a - 9.79 \times 10^{22},\ 2u^{26} + 3u^{25} + \cdots + 3u + 5 \rangle$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

$$a_5 = \begin{pmatrix} -3.15056u^{25} - 3.82094u^{24} + \cdots - 32.1591u + 7.70055 \\ 1.27811u^{25} + 2.53270u^{24} + \cdots + 10.2992u + 3.02215 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u \\ u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -3.17174u^{25} - 2.90632u^{24} + \cdots - 34.5596u + 11.5016 \\ 1.29929u^{25} + 1.61808u^{24} + \cdots + 12.6997u - 0.778933 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -3.02056u^{25} - 2.73307u^{24} + \cdots - 28.3790u + 12.9849 \\ 1.04423u^{25} + 1.41495u^{24} + \cdots + 8.63488u + 0.789972 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -1.28799u^{25} - 1.45837u^{24} + \cdots - 24.5359u + 9.00385 \\ 0.947693u^{25} + 1.79106u^{24} + \cdots + 14.4576u - 1.69050 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 4.14969u^{25} + 4.29557u^{24} + \cdots + 59.5932u - 13.0060 \\ -0.880620u^{25} - 0.966252u^{24} + \cdots - 19.0119u + 1.59597 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.182558u^{25} - 0.176354u^{24} + \cdots + 25.0268u - 7.11541 \\ 0.533120u^{25} + 1.45644u^{24} + \cdots - 6.50589u + 6.77145 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.743734u^{25} + 0.470887u^{24} + \cdots + 12.7345u - 0.708825 \\ -0.796874u^{25} - 0.999327u^{24} + \cdots - 10.5483u + 2.03149 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -3.07289u^{25} - 3.63312u^{24} + \cdots - 55.1391u + 17.4838 \\ 1.26243u^{25} + 2.27407u^{24} + \cdots + 19.9727u - 4.31308 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{8957706328472547967206}{2543234894966602321649}u^{25} - \frac{15083092567838434344417}{254323489496602321649}u^{24} + \cdots - \frac{1422603029267767752601 19}{2543234894966602321649}u - \frac{5448907320534354158 3617}{2543234894966602321649}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$2(2u^{26} - 27u^{25} + \cdots - 101u + 43)$
c_2	$u^{26} - u^{25} + \cdots + 3u + 1$
c_3	$2(2u^{26} + 7u^{25} + \cdots + 2u + 1)$
c_4	$u^{26} + u^{25} + \cdots + 60u + 31$
c_5	$u^{26} + 2u^{25} + \cdots + u + 2$
c_6	$u^{26} + u^{25} + \cdots - 3u + 1$
c_7	$2(2u^{26} + 3u^{25} + \cdots + 3u + 5)$
c_8	$u^{26} + 4u^{25} + \cdots - 2u + 1$
c_9	$2(2u^{26} - 7u^{25} + \cdots - 2u + 1)$
c_{10}	$u^{26} + 7u^{24} + \cdots + u + 2$
c_{11}	$2(2u^{26} - 3u^{25} + \cdots - 3u + 5)$
c_{12}	$4(4u^{26} - 11u^{25} + \cdots - 74u + 19)$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$4(4y^{26} - 113y^{25} + \cdots + 3645y + 1849)$
c_2, c_6	$y^{26} + 7y^{25} + \cdots + 15y + 1$
c_3, c_9	$4(4y^{26} - 37y^{25} + \cdots + 4y + 1)$
c_4	$y^{26} + 21y^{25} + \cdots + 4646y + 961$
c_5	$y^{26} + 20y^{24} + \cdots + 103y + 4$
c_7, c_{11}	$4(4y^{26} + 107y^{25} + \cdots + 581y + 25)$
c_8	$y^{26} - 6y^{25} + \cdots + 14y + 1$
c_{10}	$y^{26} + 14y^{25} + \cdots - y + 4$
c_{12}	$16(16y^{26} - 545y^{25} + \cdots - 6160y + 361)$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.093841+1.031720I$ $a=-1.86117-0.11292I$ $b=\ \ 2.26755-0.34607I$	$6.38440+0.40642I$	$-3.29683+1.73011I$
$u=-0.093841-1.031720I$ $a=-1.86117+0.11292I$ $b=\ \ 2.26755+0.34607I$	$6.38440-0.40642I$	$-3.29683-1.73011I$
$u=-0.892339+0.285855I$ $a=-0.698036+0.392925I$ $b=-0.490163-0.492975I$	$-0.34275+1.53093I$	$-9.99239-3.21099I$
$u=-0.892339-0.285855I$ $a=-0.698036-0.392925I$ $b=-0.490163+0.492975I$	$-0.34275-1.53093I$	$-9.99239+3.21099I$
$u=\ \ 0.857561+0.346086I$ $a=\ \ 0.170569-0.299589I$ $b=-0.159930+0.592271I$	$-1.62614+1.72699I$	$-14.2649-3.7983I$
$u=\ \ 0.857561-0.346086I$ $a=\ \ 0.170569+0.299589I$ $b=-0.159930-0.592271I$	$-1.62614-1.72699I$	$-14.2649+3.7983I$
$u=-0.441215+1.028280I$ $a=-1.59099+0.55970I$ $b=\ \ 2.07746-0.27910I$	$8.13583+1.76508I$	$-6.93534-8.95904I$
$u=-0.441215-1.028280I$ $a=-1.59099-0.55970I$ $b=\ \ 2.07746+0.27910I$	$8.13583-1.76508I$	$-6.93534+8.95904I$
$u=\ \ 0.120572+1.131100I$ $a=\ \ 0.661863+0.339366I$ $b=-1.76827+1.10631I$	$2.95392-3.52625I$	$0.774646+0.743499I$
$u=\ \ 0.120572-1.131100I$ $a=\ \ 0.661863-0.339366I$ $b=-1.76827-1.10631I$	$2.95392+3.52625I$	$0.774646-0.743499I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.504964 + 0.668691I$ $a = 0.081169 + 1.214460I$ $b = -1.76357 - 0.68487I$	$-8.64330 - 6.02727I$	$-9.72659 + 4.66930I$
$u = 0.504964 - 0.668691I$ $a = 0.081169 - 1.214460I$ $b = -1.76357 + 0.68487I$	$-8.64330 + 6.02727I$	$-9.72659 - 4.66930I$
$u = 0.255755 + 1.173940I$ $a = -0.827640 + 0.464151I$ $b = 1.64429 + 0.44080I$	$0.39482 - 5.40053I$	$-4.61104 + 7.42054I$
$u = 0.255755 - 1.173940I$ $a = -0.827640 - 0.464151I$ $b = 1.64429 - 0.44080I$	$0.39482 + 5.40053I$	$-4.61104 - 7.42054I$
$u = 0.017834 + 1.281180I$ $a = -0.518334 + 0.025264I$ $b = 2.18360 - 0.78912I$	$3.97615 + 0.02420I$	$-1.50757 + 0.97966I$
$u = 0.017834 - 1.281180I$ $a = -0.518334 - 0.025264I$ $b = 2.18360 + 0.78912I$	$3.97615 - 0.02420I$	$-1.50757 - 0.97966I$
$u = 0.012793 + 0.520722I$ $a = 1.35963 + 1.19227I$ $b = -0.422136 + 1.022280I$	$0.84916 + 2.58424I$	$-7.44172 - 4.08752I$
$u = 0.012793 - 0.520722I$ $a = 1.35963 - 1.19227I$ $b = -0.422136 - 1.022280I$	$0.84916 - 2.58424I$	$-7.44172 + 4.08752I$
$u = -0.23818 + 1.50712I$ $a = -0.960593 - 0.604711I$ $b = 1.96189 + 0.59778I$	$8.27085 + 4.64071I$	$-15.0125 + 3.7642I$
$u = -0.23818 - 1.50712I$ $a = -0.960593 + 0.604711I$ $b = 1.96189 - 0.59778I$	$8.27085 - 4.64071I$	$-15.0125 - 3.7642I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.61918+1.41182I$ $a=\ \ 0.921209+0.081616I$ $b=-1.63904-0.46965I$	$4.53565+8.09953I$	$-3.94785-6.19470I$
$u=-0.61918-1.41182I$ $a=\ \ 0.921209-0.081616I$ $b=-1.63904+0.46965I$	$4.53565-8.09953I$	$-3.94785+6.19470I$
$u=-0.091702+0.419701I$ $a=-1.08553-3.39215I$ $b=\ \ 0.372307+0.860688I$	$-5.76127+0.88146I$	$-14.4603-4.2768I$
$u=-0.091702-0.419701I$ $a=-1.08553+3.39215I$ $b=\ \ 0.372307-0.860688I$	$-5.76127-0.88146I$	$-14.4603+4.2768I$
$u=-0.14302+2.03303I$ $a=-0.052154+0.337702I$ $b=\ \ 0.236008-0.418304I$	$-1.033050+0.572499I$	0
$u=-0.14302-2.03303I$ $a=-0.052154-0.337702I$ $b=\ \ 0.236008+0.418304I$	$-1.033050-0.572499I$	0

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$4(2u^{26}-27u^{25}+\cdots-101u+43)(2u^{74}-3u^{73}+\cdots+5635u+1357)$
c_2	$(u^{26}-u^{25}+\cdots+3u+1)(u^{74}-2u^{73}+\cdots-215u+91)$
c_3	$4(2u^{26}+7u^{25}+\cdots+2u+1)$ $\cdot(2u^{74}+5u^{73}+\cdots+1357162u-1267391)$
c_4	$(u^{26}+u^{25}+\cdots+60u+31)(u^{74}+2u^{73}+\cdots-15076u+11221)$
c_5	$(u^{26}+2u^{25}+\cdots+u+2)(u^{74}+u^{73}+\cdots+15239u-3254)$
c_6	$(u^{26}+u^{25}+\cdots-3u+1)(u^{74}-2u^{73}+\cdots-215u+91)$
c_7	$4(2u^{26}+3u^{25}+\cdots+3u+5)(2u^{74}+7u^{73}+\cdots+16845u-2941)$
c_8	$(u^{26}+4u^{25}+\cdots-2u+1)(u^{74}+u^{73}+\cdots-327620u-108299)$
c_9	$4(2u^{26}-7u^{25}+\cdots-2u+1)$ $\cdot(2u^{74}+5u^{73}+\cdots+1357162u-1267391)$
c_{10}	$(u^{26}+7u^{24}+\cdots+u+2)(u^{74}+u^{73}+\cdots-2955u-682)$
c_{11}	$4(2u^{26}-3u^{25}+\cdots-3u+5)(2u^{74}+7u^{73}+\cdots+16845u-2941)$
c_{12}	$16(4u^{26}-11u^{25}+\cdots-74u+19)$ $\cdot(4u^{74}-55u^{73}+\cdots-5042508u+189693)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$16(4y^{26}-113y^{25}+\cdots+3645y+1849)$ $\cdot(4y^{74}-365y^{73}+\cdots-476298283y+1841449)$
c_2, c_6	$(y^{26}+7y^{25}+\cdots+15y+1)(y^{74}+44y^{73}+\cdots+374559y+8281)$
c_3, c_9	$16(4y^{26}-37y^{25}+\cdots+4y+1)$ $\cdot(4y^{74}-385y^{73}+\cdots-17116221408916y+1606279946881)$
c_4	$(y^{26}+21y^{25}+\cdots+4646y+961)$ $\cdot(y^{74}+42y^{73}+\cdots+674142038y+125910841)$
c_5	$(y^{26}+20y^{24}+\cdots+103y+4)$ $\cdot(y^{74}-23y^{73}+\cdots-131821697y+10588516)$
c_7, c_{11}	$16(4y^{26}+107y^{25}+\cdots+581y+25)$ $\cdot(4y^{74}+223y^{73}+\cdots+57513733y+8649481)$
c_8	$(y^{26}-6y^{25}+\cdots+14y+1)$ $\cdot(y^{74}-73y^{73}+\cdots-102167052718y+11728673401)$
c_{10}	$(y^{26}+14y^{25}+\cdots-y+4)(y^{74}+27y^{73}+\cdots+1.14170\times10^{7}y+465124)$
c_{12}	$256(16y^{26}-545y^{25}+\cdots-6160y+361)$ $\cdot(16y^{74}-1361y^{73}+\cdots-3953884413420y+35983434249)$