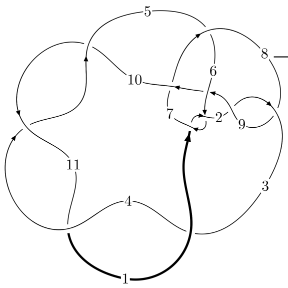
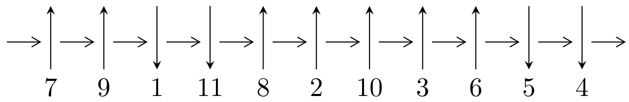
$11a_{325}$ ($K11a_{325}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle b - u,\ -36589u^{20} - 75173u^{19} + \cdots + 133419a + 168070,\ u^{21} + 7u^{19} + \cdots + 2u - 1\rangle$$

$$I_2^u = \langle -1.50267 \times 10^{47}u^{35} + 7.89794 \times 10^{47}u^{34} + \cdots + 8.17083 \times 10^{48}b + 1.26464 \times 10^{50},$$
$$1.51725 \times 10^{32}u^{35} + 1.19597 \times 10^{32}u^{34} + \cdots + 1.00338 \times 10^{33}a - 5.77606 \times 10^{33},\ u^{36} + u^{35} + \cdots - 88u + 1$$

$$I_3^u = \langle b + u,\ -u^9 - u^8 - 5u^7 - 5u^6 - 11u^5 - 9u^4 - 11u^3 - 6u^2 + a - 5u - 1,$$
$$u^{10} + 5u^8 + u^7 + 10u^6 + 3u^5 + 9u^4 + 3u^3 + 4u^2 + 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 67 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. $I_1^u = \langle b-u,\ -3.66\times10^4u^{20} - 7.52\times10^4u^{19} + \cdots + 1.33\times10^5a + 1.68\times10^5,\ u^{21}+7u^{19}+\cdots+2u-1\rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_3 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$
$$a_6 = \begin{pmatrix}0.274241u^{20}+0.563435u^{19}+\cdots-0.725182u-1.25972\\u\end{pmatrix}$$
$$a_7 = \begin{pmatrix}0.274241u^{20}+0.563435u^{19}+\cdots+0.274818u-1.25972\\u\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-0.364446u^{20}-0.326445u^{19}+\cdots+0.141996u+0.459290\\-0.171242u^{20}-0.393302u^{19}+\cdots+0.147370u+0.563435\end{pmatrix}$$
$$a_1 = \begin{pmatrix}0.563435u^{20}-0.171242u^{19}+\cdots-1.80820u+1.27424\\u^2\end{pmatrix}$$
$$a_4 = \begin{pmatrix}-0.535284u^{20}+0.170748u^{19}+\cdots+1.53655u+0.520353\\0.0475045u^{20}+0.315750u^{19}+\cdots+0.00530659u-0.199304\end{pmatrix}$$
$$a_8 = \begin{pmatrix}-u\\u^3+u\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0.644788u^{20}+0.909233u^{19}+\cdots-0.487914u-1.42985\\-0.254102u^{20}+0.0146306u^{19}+\cdots+1.08378u-0.175665\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-0.582496u^{20}-0.577624u^{19}+\cdots-0.376093u+0.851783\\-0.441159u^{20}-0.406276u^{19}+\cdots+0.464934u+0.246457\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-0.582496u^{20}-0.577624u^{19}+\cdots-0.376093u+0.851783\\-0.441159u^{20}-0.406276u^{19}+\cdots+0.464934u+0.246457\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{129645}{44473}u^{20} + \frac{33237}{44473}u^{19} + \cdots - \frac{265846}{44473}u + \frac{357015}{44473}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_6 c_8	$u^{21} + 7u^{19} + \cdots + 2u - 1$
c_3, c_4, c_{10} c_{11}	$u^{21} - 6u^{20} + \cdots + 38u - 4$
c_5, c_7	$u^{21} - 6u^{19} + \cdots - 7u - 1$
c_9	$u^{21} - 18u^{20} + \cdots + 4352u - 512$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_8	$y^{21} + 14y^{20} + \cdots + 12y^2 - 1$
c_3, c_4, c_{10} c_{11}	$y^{21} + 24y^{20} + \cdots + 108y - 16$
c_5, c_7	$y^{21} - 12y^{20} + \cdots + 27y - 1$
c_9	$y^{21} + 2y^{20} + \cdots + 65536y - 262144$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.089530 + 0.984696I$ $a = -0.10595 + 1.89249I$ $b = -0.089530 + 0.984696I$	$-0.41138 - 2.40421I$	$1.72315 + 4.22426I$
$u = -0.089530 - 0.984696I$ $a = -0.10595 - 1.89249I$ $b = -0.089530 - 0.984696I$	$-0.41138 + 2.40421I$	$1.72315 - 4.22426I$
$u = -0.709348 + 0.727206I$ $a = 1.013410 - 0.479147I$ $b = -0.709348 + 0.727206I$	$8.83155 - 2.25669I$	$7.66847 + 3.47538I$
$u = -0.709348 - 0.727206I$ $a = 1.013410 + 0.479147I$ $b = -0.709348 - 0.727206I$	$8.83155 + 2.25669I$	$7.66847 - 3.47538I$
$u = 0.241671 + 1.064200I$ $a = 0.20712 + 1.60998I$ $b = 0.241671 + 1.064200I$	$6.84048 + 5.76907I$	$4.07518 - 4.56239I$
$u = 0.241671 - 1.064200I$ $a = 0.20712 - 1.60998I$ $b = 0.241671 - 1.064200I$	$6.84048 - 5.76907I$	$4.07518 + 4.56239I$
$u = 0.819786 + 0.389956I$ $a = -0.690629 + 0.984448I$ $b = 0.819786 + 0.389956I$	$10.89630 - 2.89300I$	$9.55027 + 0.75508I$
$u = 0.819786 - 0.389956I$ $a = -0.690629 - 0.984448I$ $b = 0.819786 - 0.389956I$	$10.89630 + 2.89300I$	$9.55027 - 0.75508I$
$u = 0.420437 + 1.104620I$ $a = -1.57981 - 0.05796I$ $b = 0.420437 + 1.104620I$	$-1.62807 + 2.56050I$	$4.45468 - 5.57761I$
$u = 0.420437 - 1.104620I$ $a = -1.57981 + 0.05796I$ $b = 0.420437 - 1.104620I$	$-1.62807 - 2.56050I$	$4.45468 + 5.57761I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.628080+0.259561I$ $a=\ \ 0.99006+1.03585I$ $b=-0.628080+0.259561I$	$2.86823+1.78605I$	$10.67672-1.49019I$
$u=-0.628080-0.259561I$ $a=\ \ 0.99006-1.03585I$ $b=-0.628080-0.259561I$	$2.86823-1.78605I$	$10.67672+1.49019I$
$u=-0.476681+1.277180I$ $a=\ \ 1.297630+0.183037I$ $b=-0.476681+1.277180I$	$-5.88506-6.78578I$	$-0.85150+5.15843I$
$u=-0.476681-1.277180I$ $a=\ \ 1.297630-0.183037I$ $b=-0.476681-1.277180I$	$-5.88506+6.78578I$	$-0.85150-5.15843I$
$u=\ \ 0.274697+0.539680I$ $a=-0.715108-0.945305I$ $b=\ \ 0.274697+0.539680I$	$0.19501+1.45011I$	$2.94900-3.15728I$
$u=\ \ 0.274697-0.539680I$ $a=-0.715108+0.945305I$ $b=\ \ 0.274697-0.539680I$	$0.19501-1.45011I$	$2.94900+3.15728I$
$u=\ \ 0.55258+1.36736I$ $a=-1.134920+0.188406I$ $b=\ \ 0.55258+1.36736I$	$-4.07842+11.41590I$	$1.76912-8.47188I$
$u=\ \ 0.55258-1.36736I$ $a=-1.134920-0.188406I$ $b=\ \ 0.55258-1.36736I$	$-4.07842-11.41590I$	$1.76912+8.47188I$
$u=-0.62291+1.42854I$ $a=\ \ 1.038290+0.171241I$ $b=-0.62291+1.42854I$	$4.0861-14.4126I$	$4.28661+7.20471I$
$u=-0.62291-1.42854I$ $a=\ \ 1.038290-0.171241I$ $b=-0.62291-1.42854I$	$4.0861+14.4126I$	$4.28661-7.20471I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \ \ 0.434772$ $a = -1.64018$ $b = \ \ 0.434772$	0.983801	10.3970

II. $\boldsymbol{I_2^u = \langle -1.50 \times 10^{47} u^{35} + 7.90 \times 10^{47} u^{34} + \cdots + 8.17 \times 10^{48} b + 1.26 \times 10^{50},\ 1.52 \times 10^{32} u^{35} + 1.20 \times 10^{32} u^{34} + \cdots + 1.00 \times 10^{33} a - 5.78 \times 10^{33},\ u^{36} + u^{35} + \cdots - 88u + 121 \rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.151215u^{35} - 0.119194u^{34} + \cdots - 29.7352u + 5.75661 \\ 0.0183906u^{35} - 0.0966602u^{34} + \cdots + 19.1446u - 15.4775 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.132824u^{35} - 0.215854u^{34} + \cdots - 10.5906u - 9.72088 \\ 0.0183906u^{35} - 0.0966602u^{34} + \cdots + 19.1446u - 15.4775 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.142950u^{35} - 0.110929u^{34} + \cdots - 23.0740u + 5.02934 \\ -0.0996243u^{35} - 0.0572367u^{34} + \cdots - 8.34916u + 0.642617 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.235158u^{35} + 0.150714u^{34} + \cdots + 43.1286u - 10.6737 \\ 0.240469u^{35} + 0.255649u^{34} + \cdots + 27.1442u - 2.79189 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.231245u^{35} - 0.605373u^{34} + \cdots + 13.5883u - 48.7866 \\ -0.0590880u^{35} - 0.422425u^{34} + \cdots + 36.6423u - 48.0768 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -0.181447u^{35} - 0.279824u^{34} + \cdots - 22.4844u - 9.51522 \\ 0.0242422u^{35} - 0.0920959u^{34} + \cdots + 19.7108u - 15.9838 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.342315u^{35} - 0.0676417u^{34} + \cdots - 73.5185u + 27.0801 \\ -0.340322u^{35} - 0.200761u^{34} + \cdots - 48.3147u + 13.7797 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.342315u^{35} - 0.0676417u^{34} + \cdots - 73.5185u + 27.0801 \\ -0.340322u^{35} - 0.200761u^{34} + \cdots - 48.3147u + 13.7797 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.0198670u^{35} + 0.230113u^{34} + \cdots - 18.4708u + 28.1644$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_6 c_8	$u^{36} + u^{35} + \cdots - 88u + 121$
c_3, c_4, c_{10} c_{11}	$(u^9 + u^8 + 6u^7 + 5u^6 + 11u^5 + 7u^4 + 6u^3 + 2u^2 + u + 1)^4$
c_5, c_7	$u^{36} + 9u^{35} + \cdots - 8u + 1$
c_9	$(u^2 + u + 1)^{18}$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_8	$y^{36} + 27y^{35} + \cdots + 187308y + 14641$
c_3, c_4, c_{10} c_{11}	$(y^9 + 11y^8 + 48y^7 + 105y^6 + 121y^5 + 73y^4 + 20y^3 - 6y^2 - 3y - 1)^4$
c_5, c_7	$y^{36} + 3y^{35} + \cdots - 44y + 1$
c_9	$(y^2 + y + 1)^{18}$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.039626+0.981491I$ $a=\quad 0.860387-0.544166I$ $b=-0.29688-1.73262I$	$2.12882-0.18400I$	$2.24115-0.41812I$
$u=-0.039626-0.981491I$ $a=\quad 0.860387+0.544166I$ $b=-0.29688+1.73262I$	$2.12882+0.18400I$	$2.24115+0.41812I$
$u=\quad 0.154191+1.093140I$ $a=\quad 0.840038-0.338907I$ $b=-0.794470+0.015853I$	$-2.09801+2.02988I$	$-0.33330-3.46410I$
$u=\quad 0.154191-1.093140I$ $a=\quad 0.840038+0.338907I$ $b=-0.794470-0.015853I$	$-2.09801-2.02988I$	$-0.33330+3.46410I$
$u=-0.129901+1.110370I$ $a=-0.821381-0.354208I$ $b=\quad 0.40998-1.53870I$	$-4.89942-0.92019I$	$-1.44626-2.77537I$
$u=-0.129901-1.110370I$ $a=-0.821381+0.354208I$ $b=\quad 0.40998+1.53870I$	$-4.89942+0.92019I$	$-1.44626+2.77537I$
$u=\quad 1.165700+0.010466I$ $a=\quad 0.435562+0.739012I$ $b=-0.334918-1.124560I$	$0.22800+5.44061I$	$3.88238-7.86053I$
$u=\quad 1.165700-0.010466I$ $a=\quad 0.435562-0.739012I$ $b=-0.334918+1.124560I$	$0.22800-5.44061I$	$3.88238+7.86053I$
$u=-0.334918+1.124560I$ $a=-0.828987-0.197728I$ $b=\quad 1.165700-0.010466I$	$0.22800-5.44061I$	$3.88238+7.86053I$
$u=-0.334918-1.124560I$ $a=-0.828987+0.197728I$ $b=\quad 1.165700+0.010466I$	$0.22800+5.44061I$	$3.88238-7.86053I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.794470 + 0.015853I$ $a = -0.607357 - 1.102190I$ $b = 0.154191 + 1.093140I$	$-2.09801 + 2.02988I$	$-0.33330 - 3.46410I$
$u = -0.794470 - 0.015853I$ $a = -0.607357 + 1.102190I$ $b = 0.154191 - 1.093140I$	$-2.09801 - 2.02988I$	$-0.33330 + 3.46410I$
$u = -0.806995 + 0.905050I$ $a = 0.258644 - 0.783077I$ $b = 0.264260 + 0.503586I$	$8.52641 - 3.47060I$	$5.48937 - 0.49112I$
$u = -0.806995 - 0.905050I$ $a = 0.258644 + 0.783077I$ $b = 0.264260 - 0.503586I$	$8.52641 + 3.47060I$	$5.48937 + 0.49112I$
$u = 0.446862 + 1.134250I$ $a = 0.811273 - 0.121202I$ $b = -1.395410 + 0.040090I$	$8.52641 + 7.53037I$	$5.48937 - 6.43708I$
$u = 0.446862 - 1.134250I$ $a = 0.811273 + 0.121202I$ $b = -1.395410 - 0.040090I$	$8.52641 - 7.53037I$	$5.48937 + 6.43708I$
$u = 0.021359 + 0.770389I$ $a = -1.105300 - 0.679667I$ $b = 0.528085 + 0.506138I$	$0.227995 + 1.380850I$	$3.88238 - 0.93232I$
$u = 0.021359 - 0.770389I$ $a = -1.105300 + 0.679667I$ $b = 0.528085 - 0.506138I$	$0.227995 - 1.380850I$	$3.88238 + 0.93232I$
$u = 0.528085 + 0.506138I$ $a = -0.325738 - 1.327740I$ $b = 0.021359 + 0.770389I$	$0.227995 + 1.380850I$	$3.88238 - 0.93232I$
$u = 0.528085 - 0.506138I$ $a = -0.325738 + 1.327740I$ $b = 0.021359 - 0.770389I$	$0.227995 - 1.380850I$	$3.88238 + 0.93232I$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \ \ 0.153431 + 1.311480I$ $a = \ \ 0.695425 - 0.299890I$ $b = -0.66442 - 1.33987I$	$-4.89942 + 3.13958I$	$-1.44626 - 9.70357I$
$u = \ \ 0.153431 - 1.311480I$ $a = \ \ 0.695425 + 0.299890I$ $b = -0.66442 + 1.33987I$	$-4.89942 - 3.13958I$	$-1.44626 + 9.70357I$
$u = -1.395410 + 0.040090I$ $a = -0.340206 - 0.630399I$ $b = \ \ 0.446862 + 1.134250I$	$8.52641 + 7.53037I$	$5.48937 - 6.43708I$
$u = -1.395410 - 0.040090I$ $a = -0.340206 + 0.630399I$ $b = \ \ 0.446862 - 1.134250I$	$8.52641 - 7.53037I$	$5.48937 + 6.43708I$
$u = -0.134013 + 1.399190I$ $a = -0.647238 - 0.295359I$ $b = \ \ 0.95276 - 1.31505I$	$2.12882 - 4.24376I$	$2.24115 + 6.51008I$
$u = -0.134013 - 1.399190I$ $a = -0.647238 + 0.295359I$ $b = \ \ 0.95276 + 1.31505I$	$2.12882 + 4.24376I$	$2.24115 - 6.51008I$
$u = \ \ 0.264260 + 0.503586I$ $a = \ \ 1.75693 - 0.07092I$ $b = -0.806995 + 0.905050I$	$8.52641 - 3.47060I$	$5.48937 - 0.49112I$
$u = \ \ 0.264260 - 0.503586I$ $a = \ \ 1.75693 + 0.07092I$ $b = -0.806995 - 0.905050I$	$8.52641 + 3.47060I$	$5.48937 + 0.49112I$
$u = -0.66442 + 1.33987I$ $a = -0.667309 - 0.042265I$ $b = \ \ 0.153431 - 1.311480I$	$-4.89942 - 3.13958I$	$-1.44626 + 9.70357I$
$u = -0.66442 - 1.33987I$ $a = -0.667309 + 0.042265I$ $b = \ \ 0.153431 + 1.311480I$	$-4.89942 + 3.13958I$	$-1.44626 - 9.70357I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.40998 + 1.53870I$ $a = 0.606362 - 0.163388I$ $b = -0.129901 - 1.110370I$	$-4.89942 + 0.92019I$	$0. + 2.77537I$
$u = 0.40998 - 1.53870I$ $a = 0.606362 + 0.163388I$ $b = -0.129901 + 1.110370I$	$-4.89942 - 0.92019I$	$0. - 2.77537I$
$u = 0.95276 + 1.31505I$ $a = 0.612508 + 0.063552I$ $b = -0.134013 - 1.399190I$	$2.12882 + 4.24376I$	$0. - 6.51008I$
$u = 0.95276 - 1.31505I$ $a = 0.612508 - 0.063552I$ $b = -0.134013 + 1.399190I$	$2.12882 - 4.24376I$	$0. + 6.51008I$
$u = -0.29688 + 1.73262I$ $a = -0.533617 - 0.197147I$ $b = -0.039626 - 0.981491I$	$2.12882 + 0.18400I$	0
$u = -0.29688 - 1.73262I$ $a = -0.533617 + 0.197147I$ $b = -0.039626 + 0.981491I$	$2.12882 - 0.18400I$	0

III. $\boldsymbol{I_3^u = \langle b+u,\ -u^9-u^8+\cdots+a-1,\ u^{10}+5u^8+\cdots+4u^2+1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_9 = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_3 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$

$$a_6 = \begin{pmatrix}u^9+u^8+5u^7+5u^6+11u^5+9u^4+11u^3+6u^2+5u+1\\-u\end{pmatrix}$$

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

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

$$a_1 = \begin{pmatrix}-u^9-4u^7-u^6-6u^5-2u^4-3u^3-u+2\\u^2\end{pmatrix}$$

$$a_4 = \begin{pmatrix}u^9+u^8+5u^7+6u^6+10u^5+12u^4+8u^3+9u^2+2u+2\\-u^9-4u^7-6u^5-3u^3-u^2-u\end{pmatrix}$$

$$a_8 = \begin{pmatrix}-u\\u^3+u\end{pmatrix}$$

$$a_5 = \begin{pmatrix}u^9+u^8+5u^7+5u^6+11u^5+9u^4+12u^3+6u^2+6u+1\\-u^5-2u^3-2u\end{pmatrix}$$

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

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -5u^9-3u^8-23u^7-19u^6-43u^5-38u^4-34u^3-27u^2-12u+3$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_8	$u^{10} + 5u^8 - u^7 + 10u^6 - 3u^5 + 9u^4 - 3u^3 + 4u^2 + 1$
c_2, c_6	$u^{10} + 5u^8 + u^7 + 10u^6 + 3u^5 + 9u^4 + 3u^3 + 4u^2 + 1$
c_3, c_4	$u^{10} + u^9 + 7u^8 + 6u^7 + 17u^6 + 12u^5 + 17u^4 + 8u^3 + 7u^2 + 1$
c_5, c_7	$u^{10} + 3u^7 + 3u^6 + 3u^4 + 4u^3 + u^2 + u + 1$
c_9	$u^{10} - u^9 + u^8 - 4u^7 + 3u^6 + 3u^4 - 3u^3 + 1$
c_{10}, c_{11}	$u^{10} - u^9 + 7u^8 - 6u^7 + 17u^6 - 12u^5 + 17u^4 - 8u^3 + 7u^2 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_8	$y^{10} + 10y^9 + \cdots + 8y + 1$
c_3, c_4, c_{10} c_{11}	$y^{10} + 13y^9 + \cdots + 14y + 1$
c_5, c_7	$y^{10} + 6y^8 - 3y^7 + 11y^6 - 4y^5 + 9y^4 - 4y^3 - y^2 + y + 1$
c_9	$y^{10} + y^9 - y^8 - 4y^7 + 9y^6 - 4y^5 + 11y^4 - 3y^3 + 6y^2 + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.280592 + 1.135800I$ $a = 1.269010 - 0.099088I$ $b = -0.280592 - 1.135800I$	$-2.18773 + 1.37103I$	$1.096751 - 0.038075I$
$u = 0.280592 - 1.135800I$ $a = 1.269010 + 0.099088I$ $b = -0.280592 + 1.135800I$	$-2.18773 - 1.37103I$	$1.096751 + 0.038075I$
$u = -0.536137 + 0.558503I$ $a = 0.240076 + 1.102590I$ $b = 0.536137 - 0.558503I$	$8.73669 - 4.86888I$	$6.80228 + 5.06388I$
$u = -0.536137 - 0.558503I$ $a = 0.240076 - 1.102590I$ $b = 0.536137 + 0.558503I$	$8.73669 + 4.86888I$	$6.80228 - 5.06388I$
$u = -0.339392 + 1.319900I$ $a = -0.628272 - 0.235688I$ $b = 0.339392 - 1.319900I$	$-4.67120 - 2.22664I$	$2.12135 + 1.13341I$
$u = -0.339392 - 1.319900I$ $a = -0.628272 + 0.235688I$ $b = 0.339392 + 1.319900I$	$-4.67120 + 2.22664I$	$2.12135 - 1.13341I$
$u = 0.205182 + 0.502042I$ $a = -0.29922 + 2.23836I$ $b = -0.205182 - 0.502042I$	$0.90716 + 2.13686I$	$9.07211 - 6.04607I$
$u = 0.205182 - 0.502042I$ $a = -0.29922 - 2.23836I$ $b = -0.205182 + 0.502042I$	$0.90716 - 2.13686I$	$9.07211 + 6.04607I$
$u = 0.38975 + 1.44195I$ $a = 0.418413 - 0.189778I$ $b = -0.38975 - 1.44195I$	$2.14990 + 2.75317I$	$2.40750 - 1.04370I$
$u = 0.38975 - 1.44195I$ $a = 0.418413 + 0.189778I$ $b = -0.38975 + 1.44195I$	$2.14990 - 2.75317I$	$2.40750 + 1.04370I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_8	$(u^{10} + 5u^8 - u^7 + 10u^6 - 3u^5 + 9u^4 - 3u^3 + 4u^2 + 1)$ $\cdot (u^{21} + 7u^{19} + \cdots + 2u - 1)(u^{36} + u^{35} + \cdots - 88u + 121)$
c_2, c_6	$(u^{10} + 5u^8 + u^7 + 10u^6 + 3u^5 + 9u^4 + 3u^3 + 4u^2 + 1)$ $\cdot (u^{21} + 7u^{19} + \cdots + 2u - 1)(u^{36} + u^{35} + \cdots - 88u + 121)$
c_3, c_4	$(u^9 + u^8 + 6u^7 + 5u^6 + 11u^5 + 7u^4 + 6u^3 + 2u^2 + u + 1)^4$ $\cdot (u^{10} + u^9 + 7u^8 + 6u^7 + 17u^6 + 12u^5 + 17u^4 + 8u^3 + 7u^2 + 1)$ $\cdot (u^{21} - 6u^{20} + \cdots + 38u - 4)$
c_5, c_7	$(u^{10} + 3u^7 + \cdots + u + 1)(u^{21} - 6u^{19} + \cdots - 7u - 1)$ $\cdot (u^{36} + 9u^{35} + \cdots - 8u + 1)$
c_9	$(u^2 + u + 1)^{18}(u^{10} - u^9 + u^8 - 4u^7 + 3u^6 + 3u^4 - 3u^3 + 1)$ $\cdot (u^{21} - 18u^{20} + \cdots + 4352u - 512)$
c_{10}, c_{11}	$(u^9 + u^8 + 6u^7 + 5u^6 + 11u^5 + 7u^4 + 6u^3 + 2u^2 + u + 1)^4$ $\cdot (u^{10} - u^9 + 7u^8 - 6u^7 + 17u^6 - 12u^5 + 17u^4 - 8u^3 + 7u^2 + 1)$ $\cdot (u^{21} - 6u^{20} + \cdots + 38u - 4)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_8	$(y^{10} + 10y^9 + \cdots + 8y + 1)(y^{21} + 14y^{20} + \cdots + 12y^2 - 1)$ $\cdot (y^{36} + 27y^{35} + \cdots + 187308y + 14641)$
c_3, c_4, c_{10} c_{11}	$(y^9 + 11y^8 + 48y^7 + 105y^6 + 121y^5 + 73y^4 + 20y^3 - 6y^2 - 3y - 1)^4$ $\cdot (y^{10} + 13y^9 + \cdots + 14y + 1)(y^{21} + 24y^{20} + \cdots + 108y - 16)$
c_5, c_7	$(y^{10} + 6y^8 - 3y^7 + 11y^6 - 4y^5 + 9y^4 - 4y^3 - y^2 + y + 1)$ $\cdot (y^{21} - 12y^{20} + \cdots + 27y - 1)(y^{36} + 3y^{35} + \cdots - 44y + 1)$
c_9	$((y^2 + y + 1)^{18})(y^{10} + y^9 + \cdots + 6y^2 + 1)$ $\cdot (y^{21} + 2y^{20} + \cdots + 65536y - 262144)$