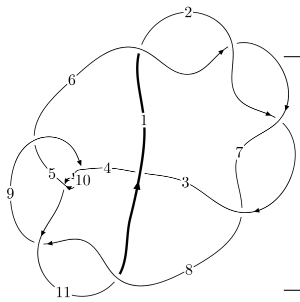
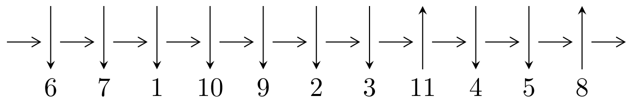
$11a_{308}$ ($K11a_{308}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{35} - u^{34} + \cdots - 2u - 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 35 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. $I^u_1 = \langle u^{35} - u^{34} + \cdots - 2u - 1\rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u^5 + 2u^3 - u \\ u^7 - 3u^5 + 2u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^4 + u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u^8 - 3u^6 + u^4 + 2u^2 + 1 \\ -u^8 + 4u^6 - 4u^4 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^{20} + 9u^{18} + \cdots + u^2 + 1 \\ u^{22} - 10u^{20} + \cdots + 2u^4 + u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^{19} + 8u^{17} - 24u^{15} + 30u^{13} - 7u^{11} - 10u^9 - 4u^7 + 6u^5 + 3u^3 + 2u \\ u^{19} - 9u^{17} + 32u^{15} - 55u^{13} + 43u^{11} - 9u^9 - 4u^5 - u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^{34} - 15u^{32} + \cdots - u^2 + 1 \\ -u^{34} + 16u^{32} + \cdots - 2u^4 - 3u^2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^{34} - 15u^{32} + \cdots - u^2 + 1 \\ -u^{34} + 16u^{32} + \cdots - 2u^4 - 3u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= -4u^{33} + 64u^{31} - 452u^{29} - 4u^{28} + 1840u^{27} + 52u^{26} - 4728u^{25} - 292u^{24} + 7904u^{23} + 916u^{22} - 8628u^{21} - 1732u^{20} + 6320u^{19} + 1988u^{18} - 3804u^{17} - 1360u^{16} + 2528u^{15} + 636u^{14} - 1276u^{13} - 364u^{12} + 276u^{11} + 144u^{10} - 180u^9 + 64u^8 + 96u^7 - 24u^6 + 36u^5 - 8u^4 + 24u^3 - 20u^2 - 4u - 14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_6 c_7	$u^{35} - u^{34} + \cdots - 2u - 1$
c_3	$u^{35} - 11u^{34} + \cdots + 444u - 113$
c_4, c_9, c_{10}	$u^{35} - u^{34} + \cdots - 2u - 1$
c_5	$u^{35} + 3u^{34} + \cdots + 54u + 9$
c_8, c_{11}	$u^{35} + 5u^{34} + \cdots + 4u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_7	$y^{35} - 41y^{34} + \cdots + 6y - 1$
c_3	$y^{35} - 17y^{34} + \cdots + 162106y - 12769$
c_4, c_9, c_{10}	$y^{35} - 33y^{34} + \cdots + 6y - 1$
c_5	$y^{35} - 13y^{34} + \cdots + 3618y - 81$
c_8, c_{11}	$y^{35} + 31y^{34} + \cdots + 298y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \quad 1.09220$	-7.72425	-11.4230
$u = -0.416127 + 0.687266I$	$-11.53560 + 7.43008I$	$-13.0479 - 5.8668I$
$u = -0.416127 - 0.687266I$	$-11.53560 - 7.43008I$	$-13.0479 + 5.8668I$
$u = -0.525382 + 0.592520I$	$-11.96020 - 3.16210I$	$-14.1562 - 0.1993I$
$u = -0.525382 - 0.592520I$	$-11.96020 + 3.16210I$	$-14.1562 + 0.1993I$
$u = \quad 0.404028 + 0.654601I$	$-3.38071 - 5.28518I$	$-11.19312 + 7.66639I$
$u = \quad 0.404028 - 0.654601I$	$-3.38071 + 5.28518I$	$-11.19312 - 7.66639I$
$u = -1.245760 + 0.112991I$	$-2.03937 + 0.97518I$	$-7.22361 + 0.37761I$
$u = -1.245760 - 0.112991I$	$-2.03937 - 0.97518I$	$-7.22361 - 0.37761I$
$u = \quad 0.478538 + 0.569763I$	$-3.71886 + 1.25391I$	$-12.53849 - 1.04095I$
$u = \quad 0.478538 - 0.569763I$	$-3.71886 - 1.25391I$	$-12.53849 + 1.04095I$
$u = -0.401418 + 0.595064I$	$-1.30259 + 1.88118I$	$-7.16532 - 3.48234I$
$u = -0.401418 - 0.595064I$	$-1.30259 - 1.88118I$	$-7.16532 + 3.48234I$
$u = \quad 1.284920 + 0.176915I$	$-2.74426 - 4.13151I$	$-10.06219 + 7.59188I$
$u = \quad 1.284920 - 0.176915I$	$-2.74426 + 4.13151I$	$-10.06219 - 7.59188I$
$u = -1.313190 + 0.225618I$	$-9.81072 + 5.98333I$	$-13.3282 - 5.5351I$
$u = -1.313190 - 0.225618I$	$-9.81072 - 5.98333I$	$-13.3282 + 5.5351I$
$u = \quad 0.140885 + 0.636642I$	$-5.27877 - 2.85435I$	$-7.73114 + 4.21990I$
$u = \quad 0.140885 - 0.636642I$	$-5.27877 + 2.85435I$	$-7.73114 - 4.21990I$
$u = \quad 0.650180$	-7.56446	-13.6890
$u = \quad 1.35428$	-5.67856	-17.2470
$u = -1.42496$	-13.8091	-17.9870
$u = -0.062444 + 0.564757I$	$1.40484 + 1.42814I$	$-2.59292 - 5.83605I$
$u = -0.062444 - 0.564757I$	$1.40484 - 1.42814I$	$-2.59292 + 5.83605I$
$u = \quad 1.45233 + 0.22468I$	$-7.26272 - 4.90638I$	$-11.00863 + 2.94514I$
$u = \quad 1.45233 - 0.22468I$	$-7.26272 + 4.90638I$	$-11.00863 - 2.94514I$
$u = -1.46000 + 0.24290I$	$-9.38489 + 8.56887I$	$-14.7051 - 7.1915I$
$u = -1.46000 - 0.24290I$	$-9.38489 - 8.56887I$	$-14.7051 + 7.1915I$
$u = -1.46668 + 0.20359I$	$-9.96671 + 1.56878I$	$-15.9909 + 0.I$
$u = -1.46668 - 0.20359I$	$-9.96671 - 1.56878I$	$-15.9909 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 1.46917 + 0.25360I$	$-17.6166 - 10.8655I$	$-16.5622 + 5.6789I$
$u = \quad 1.46917 - 0.25360I$	$-17.6166 + 10.8655I$	$-16.5622 - 5.6789I$
$u = \quad 1.48595 + 0.19714I$	$-18.4666 + 0.3155I$	$-17.6053 + 0.I$
$u = \quad 1.48595 - 0.19714I$	$-18.4666 - 0.3155I$	$-17.6053 + 0.I$
$u = -0.321346$	-0.640564	-15.8310

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_2, c_6 c_7	$u^{35} - u^{34} + \cdots - 2u - 1$
c_3	$u^{35} - 11u^{34} + \cdots + 444u - 113$
c_4, c_9, c_{10}	$u^{35} - u^{34} + \cdots - 2u - 1$
c_5	$u^{35} + 3u^{34} + \cdots + 54u + 9$
c_8, c_{11}	$u^{35} + 5u^{34} + \cdots + 4u - 1$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_7	$y^{35} - 41y^{34} + \cdots + 6y - 1$
c_3	$y^{35} - 17y^{34} + \cdots + 162106y - 12769$
c_4, c_9, c_{10}	$y^{35} - 33y^{34} + \cdots + 6y - 1$
c_5	$y^{35} - 13y^{34} + \cdots + 3618y - 81$
c_8, c_{11}	$y^{35} + 31y^{34} + \cdots + 298y - 1$