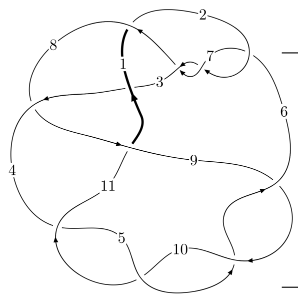
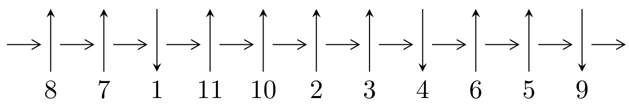
$11a_{307}$ $(K11a_{307})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{41} + u^{40} + \cdots + 3u + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 41 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. $I_1^u = \langle u^{41} + u^{40} + \cdots + 3u + 1 \rangle$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^5 - 2u^3 + u \\ u^5 + 3u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^{14} + 7u^{12} + 16u^{10} + 11u^8 - 2u^6 + 1 \\ -u^{14} - 8u^{12} - 23u^{10} - 28u^8 - 14u^6 - 4u^4 + u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^7 + 4u^5 + 4u^3 \\ u^9 + 5u^7 + 7u^5 + 2u^3 + u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} u^{21} + 12u^{19} + \cdots - 2u^3 + u \\ u^{23} + 13u^{21} + \cdots + 2u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u^{37} - 20u^{35} + \cdots + 2u^3 - u \\ u^{37} + 21u^{35} + \cdots + u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u^{37} - 20u^{35} + \cdots + 2u^3 - u \\ u^{37} + 21u^{35} + \cdots + u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u^{40} + 4u^{39} + \cdots + 16u + 14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{41} - 3u^{40} + \cdots - u + 1$
c_2, c_6, c_7	$u^{41} + u^{40} + \cdots + u - 1$
c_3	$u^{41} - 9u^{40} + \cdots + 337u - 41$
c_4, c_5, c_9 c_{10}	$u^{41} - u^{40} + \cdots + 3u - 1$
c_8	$u^{41} - u^{40} + \cdots + 127u - 61$
c_{11}	$u^{41} - 11u^{40} + \cdots + 121u - 11$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{41} - y^{40} + \cdots + 5y - 1$
c_2, c_6, c_7	$y^{41} - 37y^{40} + \cdots + y - 1$
c_3	$y^{41} + 11y^{40} + \cdots - 26979y - 1681$
c_4, c_5, c_9 c_{10}	$y^{41} + 47y^{40} + \cdots + y - 1$
c_8	$y^{41} - 13y^{40} + \cdots + 51997y - 3721$
c_{11}	$y^{41} - 5y^{40} + \cdots - 275y - 121$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.503221 + 0.690592I$	$3.83065 - 9.56504I$	$6.30600 + 8.62495I$
$u = -0.503221 - 0.690592I$	$3.83065 + 9.56504I$	$6.30600 - 8.62495I$
$u = -0.185294 + 0.816432I$	$1.86460 + 3.44778I$	$2.94863 - 1.78570I$
$u = -0.185294 - 0.816432I$	$1.86460 - 3.44778I$	$2.94863 + 1.78570I$
$u = 0.474941 + 0.689329I$	$-1.56642 + 6.05654I$	$1.56838 - 8.60655I$
$u = 0.474941 - 0.689329I$	$-1.56642 - 6.05654I$	$1.56838 + 8.60655I$
$u = -0.362848 + 0.720833I$	$-0.40127 - 2.84366I$	$1.98426 + 5.43463I$
$u = -0.362848 - 0.720833I$	$-0.40127 + 2.84366I$	$1.98426 - 5.43463I$
$u = 0.251523 + 0.749610I$	$-2.99086 - 0.25085I$	$-2.71271 + 0.09233I$
$u = 0.251523 - 0.749610I$	$-2.99086 + 0.25085I$	$-2.71271 - 0.09233I$
$u = -0.423712 + 0.649915I$	$-0.19628 - 2.43472I$	$4.58629 + 3.61518I$
$u = -0.423712 - 0.649915I$	$-0.19628 + 2.43472I$	$4.58629 - 3.61518I$
$u = 0.490024 + 0.585150I$	$5.86406 + 0.88498I$	$9.39506 - 3.49005I$
$u = 0.490024 - 0.585150I$	$5.86406 - 0.88498I$	$9.39506 + 3.49005I$
$u = 0.526987 + 0.332081I$	$6.59801 + 2.64882I$	$11.65137 - 3.90041I$
$u = 0.526987 - 0.332081I$	$6.59801 - 2.64882I$	$11.65137 + 3.90041I$
$u = -0.580129 + 0.196967I$	$5.27082 + 5.85936I$	$9.90370 - 3.39056I$
$u = -0.580129 - 0.196967I$	$5.27082 - 5.85936I$	$9.90370 + 3.39056I$
$u = 0.534664 + 0.174819I$	$-0.08359 - 2.56810I$	$5.39788 + 3.59460I$
$u = 0.534664 - 0.174819I$	$-0.08359 + 2.56810I$	$5.39788 - 3.59460I$
$u = 0.05112 + 1.44744I$	$1.03962 + 4.49848I$	0
$u = 0.05112 - 1.44744I$	$1.03962 - 4.49848I$	0
$u = -0.02545 + 1.48167I$	$-4.74796 - 1.76607I$	0
$u = -0.02545 - 1.48167I$	$-4.74796 + 1.76607I$	0
$u = -0.423895 + 0.274133I$	$0.917102 - 0.596105I$	$8.98647 + 4.74096I$
$u = -0.423895 - 0.274133I$	$0.917102 + 0.596105I$	$8.98647 - 4.74096I$
$u = -0.485948$	1.66824	7.38980
$u = 0.13066 + 1.56476I$	$-1.36673 + 3.09799I$	0
$u = 0.13066 - 1.56476I$	$-1.36673 - 3.09799I$	0
$u = -0.12154 + 1.59386I$	$-7.84552 - 4.44427I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.12154 - 1.59386I$	$-7.84552 + 4.44427I$	0
$u = 0.13746 + 1.60157I$	$-9.34338 + 8.33215I$	0
$u = 0.13746 - 1.60157I$	$-9.34338 - 8.33215I$	0
$u = -0.14703 + 1.60133I$	$-3.93253 - 11.98380I$	0
$u = -0.14703 - 1.60133I$	$-3.93253 + 11.98380I$	0
$u = -0.10039 + 1.60797I$	$-8.35529 - 4.56229I$	0
$u = -0.10039 - 1.60797I$	$-8.35529 + 4.56229I$	0
$u = 0.07637 + 1.61091I$	$-11.05980 + 1.01340I$	0
$u = 0.07637 - 1.61091I$	$-11.05980 - 1.01340I$	0
$u = -0.05726 + 1.61602I$	$-6.40559 + 2.51190I$	0
$u = -0.05726 - 1.61602I$	$-6.40559 - 2.51190I$	0

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^{41} - 3u^{40} + \cdots - u + 1$
c_2, c_6, c_7	$u^{41} + u^{40} + \cdots + u - 1$
c_3	$u^{41} - 9u^{40} + \cdots + 337u - 41$
c_4, c_5, c_9 c_{10}	$u^{41} - u^{40} + \cdots + 3u - 1$
c_8	$u^{41} - u^{40} + \cdots + 127u - 61$
c_{11}	$u^{41} - 11u^{40} + \cdots + 121u - 11$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^{41} - y^{40} + \cdots + 5y - 1$
c_2, c_6, c_7	$y^{41} - 37y^{40} + \cdots + y - 1$
c_3	$y^{41} + 11y^{40} + \cdots - 26979y - 1681$
c_4, c_5, c_9 c_{10}	$y^{41} + 47y^{40} + \cdots + y - 1$
c_8	$y^{41} - 13y^{40} + \cdots + 51997y - 3721$
c_{11}	$y^{41} - 5y^{40} + \cdots - 275y - 121$