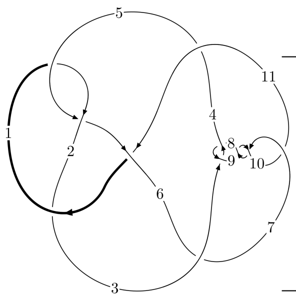
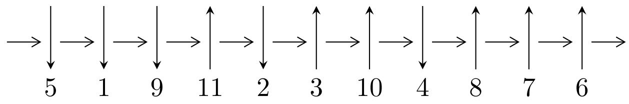
$11a_{84}$ ($K11a_{84}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{50} + u^{49} + \cdots - u + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 50 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. $\boldsymbol{I_1^u = \langle u^{50} + u^{49} + \cdots - u + 1 \rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^2 + 1 \\ u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^4 + u^2 + 1 \\ u^4 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^6 + u^4 + 2u^2 + 1 \\ u^6 + u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u^{13} + 2u^{11} + 5u^9 + 6u^7 + 6u^5 + 4u^3 + u \\ u^{13} + u^{11} + 3u^9 + 2u^7 + 2u^5 + u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^8 + u^6 + 3u^4 + 2u^2 + 1 \\ u^{10} + 2u^8 + 3u^6 + 4u^4 + u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^{24} - 3u^{22} + \cdots + 2u^2 + 1 \\ -u^{26} - 4u^{24} + \cdots - 3u^6 + u^2 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} u^{47} + 6u^{45} + \cdots + 4u^3 + 2u \\ u^{49} + 7u^{47} + \cdots + 2u^3 + u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} u^{47} + 6u^{45} + \cdots + 4u^3 + 2u \\ u^{49} + 7u^{47} + \cdots + 2u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u^{48} + 4u^{47} + \cdots - 20u^3 - 2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{50} + u^{49} + \cdots - u + 1$
c_2	$u^{50} + 23u^{49} + \cdots - u + 1$
c_3, c_8	$u^{50} - u^{49} + \cdots + u + 1$
c_4, c_6	$u^{50} - u^{49} + \cdots - 165u + 25$
c_7, c_9, c_{10}	$u^{50} - 13u^{49} + \cdots - u + 1$
c_{11}	$u^{50} + 3u^{49} + \cdots + u + 3$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{50} - 23y^{49} + \cdots + y + 1$
c_2	$y^{50} + 9y^{49} + \cdots + y + 1$
c_3, c_8	$y^{50} + 13y^{49} + \cdots + y + 1$
c_4, c_6	$y^{50} - 31y^{49} + \cdots - 16275y + 625$
c_7, c_9, c_{10}	$y^{50} + 49y^{49} + \cdots - 7y + 1$
c_{11}	$y^{50} + 5y^{49} + \cdots + 521y + 9$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.219529 + 0.986047I$	$3.94354 + 3.43046I$	$5.76669 - 1.67529I$
$u = 0.219529 - 0.986047I$	$3.94354 - 3.43046I$	$5.76669 + 1.67529I$
$u = -0.246085 + 0.982711I$	$5.58031 + 1.62349I$	$8.34360 - 3.64621I$
$u = -0.246085 - 0.982711I$	$5.58031 - 1.62349I$	$8.34360 + 3.64621I$
$u = 0.308256 + 0.923731I$	$0.40552 - 2.46934I$	$0.87793 + 4.65157I$
$u = 0.308256 - 0.923731I$	$0.40552 + 2.46934I$	$0.87793 - 4.65157I$
$u = -0.298826 + 0.987833I$	$5.26972 + 4.23270I$	$7.37704 - 4.53289I$
$u = -0.298826 - 0.987833I$	$5.26972 - 4.23270I$	$7.37704 + 4.53289I$
$u = 0.318075 + 0.994530I$	$3.36572 - 9.34553I$	$4.11417 + 9.06753I$
$u = 0.318075 - 0.994530I$	$3.36572 + 9.34553I$	$4.11417 - 9.06753I$
$u = -0.775854 + 0.801832I$	$-2.39389 + 4.71062I$	$-0.14636 - 5.46565I$
$u = -0.775854 - 0.801832I$	$-2.39389 - 4.71062I$	$-0.14636 + 5.46565I$
$u = -0.483537 + 0.734912I$	$-1.95260 + 5.09579I$	$-2.40884 - 8.50757I$
$u = -0.483537 - 0.734912I$	$-1.95260 - 5.09579I$	$-2.40884 + 8.50757I$
$u = 0.811513 + 0.797475I$	$-1.169710 + 0.163979I$	$1.95677 - 0.52892I$
$u = 0.811513 - 0.797475I$	$-1.169710 - 0.163979I$	$1.95677 + 0.52892I$
$u = 0.852019 + 0.801997I$	$-2.15185 + 2.58590I$	$0.827994 - 0.674583I$
$u = 0.852019 - 0.801997I$	$-2.15185 - 2.58590I$	$0.827994 + 0.674583I$
$u = 0.085415 + 0.824761I$	$1.16249 - 1.82384I$	$6.57065 + 4.44419I$
$u = 0.085415 - 0.824761I$	$1.16249 + 1.82384I$	$6.57065 - 4.44419I$
$u = -0.863831 + 0.802647I$	$-4.29327 - 7.68607I$	$-2.29729 + 4.73536I$
$u = -0.863831 - 0.802647I$	$-4.29327 + 7.68607I$	$-2.29729 - 4.73536I$
$u = -0.850278 + 0.827510I$	$-6.91480 - 0.19952I$	$-5.59281 + 0.I$
$u = -0.850278 - 0.827510I$	$-6.91480 + 0.19952I$	$-5.59281 + 0.I$
$u = -0.757117 + 0.952106I$	$-1.93934 + 1.09281I$	0
$u = -0.757117 - 0.952106I$	$-1.93934 - 1.09281I$	0
$u = -0.825284 + 0.899193I$	$-6.17694 + 3.07827I$	$0. - 2.72625I$
$u = -0.825284 - 0.899193I$	$-6.17694 - 3.07827I$	$0. + 2.72625I$
$u = 0.845830 + 0.890740I$	$-9.32972 + 0.72052I$	$-6.40734 + 0.I$
$u = 0.845830 - 0.890740I$	$-9.32972 - 0.72052I$	$-6.40734 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \quad 0.771222 + 0.962943I$	$-0.66571 - 6.10737I$	$0. + 5.65000I$
$u = \quad 0.771222 - 0.962943I$	$-0.66571 + 6.10737I$	$0. - 5.65000I$
$u = \quad 0.836263 + 0.917270I$	$-9.24690 - 6.97433I$	$-6.10425 + 6.45667I$
$u = \quad 0.836263 - 0.917270I$	$-9.24690 + 6.97433I$	$-6.10425 - 6.45667I$
$u = \quad 0.332618 + 0.672808I$	$0.174284 - 1.327380I$	$1.54374 + 5.34383I$
$u = \quad 0.332618 - 0.672808I$	$0.174284 + 1.327380I$	$1.54374 - 5.34383I$
$u = -0.802884 + 0.962136I$	$-6.49492 + 6.35925I$	0
$u = -0.802884 - 0.962136I$	$-6.49492 - 6.35925I$	0
$u = \quad 0.792536 + 0.977055I$	$-1.60913 - 8.71493I$	0
$u = \quad 0.792536 - 0.977055I$	$-1.60913 + 8.71493I$	0
$u = -0.798650 + 0.982182I$	$-3.7340 + 13.8696I$	$0. - 9.53503I$
$u = -0.798650 - 0.982182I$	$-3.7340 - 13.8696I$	$0. + 9.53503I$
$u = -0.488576 + 0.512324I$	$-2.60376 - 1.44363I$	$-5.78396 + 0.53575I$
$u = -0.488576 - 0.512324I$	$-2.60376 + 1.44363I$	$-5.78396 - 0.53575I$
$u = \quad 0.630218 + 0.101743I$	$0.59402 + 6.02058I$	$-1.82523 - 5.20463I$
$u = \quad 0.630218 - 0.101743I$	$0.59402 - 6.02058I$	$-1.82523 + 5.20463I$
$u = -0.605378 + 0.059120I$	$2.43882 - 1.09952I$	$1.50149 + 0.50378I$
$u = -0.605378 - 0.059120I$	$2.43882 + 1.09952I$	$1.50149 - 0.50378I$
$u = \quad 0.492805 + 0.206145I$	$-1.73630 - 0.52214I$	$-5.82516 + 0.81274I$
$u = \quad 0.492805 - 0.206145I$	$-1.73630 + 0.52214I$	$-5.82516 - 0.81274I$

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{50} + u^{49} + \cdots - u + 1$
c_2	$u^{50} + 23u^{49} + \cdots - u + 1$
c_3, c_8	$u^{50} - u^{49} + \cdots + u + 1$
c_4, c_6	$u^{50} - u^{49} + \cdots - 165u + 25$
c_7, c_9, c_{10}	$u^{50} - 13u^{49} + \cdots - u + 1$
c_{11}	$u^{50} + 3u^{49} + \cdots + u + 3$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{50} - 23y^{49} + \cdots + y + 1$
c_2	$y^{50} + 9y^{49} + \cdots + y + 1$
c_3, c_8	$y^{50} + 13y^{49} + \cdots + y + 1$
c_4, c_6	$y^{50} - 31y^{49} + \cdots - 16275y + 625$
c_7, c_9, c_{10}	$y^{50} + 49y^{49} + \cdots - 7y + 1$
c_{11}	$y^{50} + 5y^{49} + \cdots + 521y + 9$