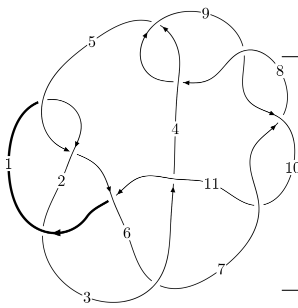
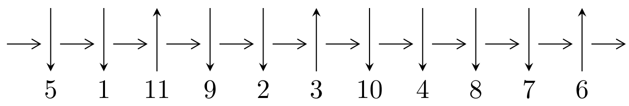
$11a_{85}$ $(K11a_{85})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{53} - u^{52} + \cdots + 3u - 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 53 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. $I_1^u = \langle u^{53} - u^{52} + \cdots + 3u - 1 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5 - u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^8 - u^6 + u^4 + 1 \\ -u^{10} + 2u^8 - 3u^6 + 2u^4 - u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^3 \\ -u^3 + u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^{11} - 2u^9 + 2u^7 - u^3 \\ -u^{11} + 3u^9 - 4u^7 + 3u^5 - u^3 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} u^{21} - 4u^{19} + 9u^{17} - 12u^{15} + 12u^{13} - 10u^{11} + 9u^9 - 6u^7 + 3u^5 + u \\ -u^{23} + 5u^{21} + \cdots - 2u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^{34} - 7u^{32} + \cdots + u^2 + 1 \\ -u^{36} + 8u^{34} + \cdots + 4u^6 - u^4 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^{47} - 10u^{45} + \cdots + 4u^5 + 2u \\ -u^{49} + 11u^{47} + \cdots - 2u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^{47} - 10u^{45} + \cdots + 4u^5 + 2u \\ -u^{49} + 11u^{47} + \cdots - 2u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^{52} + 52u^{50} + \cdots + 12u - 14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{53} + u^{52} + \cdots + 3u + 1$
c_2	$u^{53} + 25u^{52} + \cdots + 3u + 1$
c_3	$u^{53} + 7u^{52} + \cdots + 41u + 5$
c_4, c_8	$u^{53} - u^{52} + \cdots + u + 1$
c_6	$u^{53} - u^{52} + \cdots + 149u + 97$
c_7, c_9, c_{10}	$u^{53} + 13u^{52} + \cdots + 3u + 1$
c_{11}	$u^{53} + 3u^{52} + \cdots + 213u + 39$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{53} - 25y^{52} + \cdots + 3y - 1$
c_2	$y^{53} + 7y^{52} + \cdots + 3y - 1$
c_3	$y^{53} - 5y^{52} + \cdots + 911y - 25$
c_4, c_8	$y^{53} - 13y^{52} + \cdots + 3y - 1$
c_6	$y^{53} - 17y^{52} + \cdots + 199323y - 9409$
c_7, c_9, c_{10}	$y^{53} + 55y^{52} + \cdots - 5y - 1$
c_{11}	$y^{53} + 11y^{52} + \cdots - 28185y - 1521$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.044500 + 0.281512I$	$-2.20764 - 0.64085I$	$-5.73049 + 0.77381I$
$u = 1.044500 - 0.281512I$	$-2.20764 + 0.64085I$	$-5.73049 - 0.77381I$
$u = 0.601217 + 0.686706I$	$8.50588 - 6.50884I$	$1.27031 + 5.73425I$
$u = 0.601217 - 0.686706I$	$8.50588 + 6.50884I$	$1.27031 - 5.73425I$
$u = 0.974822 + 0.492221I$	$-0.225106 - 0.871265I$	$-4.08839 - 0.80386I$
$u = 0.974822 - 0.492221I$	$-0.225106 + 0.871265I$	$-4.08839 + 0.80386I$
$u = -0.586774 + 0.690510I$	$8.78157 + 0.18779I$	$1.88251 - 0.64861I$
$u = -0.586774 - 0.690510I$	$8.78157 - 0.18779I$	$1.88251 + 0.64861I$
$u = 1.109660 + 0.186764I$	$2.94416 + 0.20510I$	$-5.58587 + 0.61243I$
$u = 1.109660 - 0.186764I$	$2.94416 - 0.20510I$	$-5.58587 - 0.61243I$
$u = -1.102420 + 0.258443I$	$-4.56669 - 2.49112I$	$-11.89781 + 4.18392I$
$u = -1.102420 - 0.258443I$	$-4.56669 + 2.49112I$	$-11.89781 - 4.18392I$
$u = -1.122120 + 0.196280I$	$2.54225 - 6.40452I$	$-6.41624 + 4.33917I$
$u = -1.122120 - 0.196280I$	$2.54225 + 6.40452I$	$-6.41624 - 4.33917I$
$u = 0.971931 + 0.595508I$	$7.41049 + 1.56089I$	0
$u = 0.971931 - 0.595508I$	$7.41049 - 1.56089I$	0
$u = 0.366014 + 0.773541I$	$7.29360 + 8.95041I$	$-0.09124 - 5.62138I$
$u = 0.366014 - 0.773541I$	$7.29360 - 8.95041I$	$-0.09124 + 5.62138I$
$u = -0.376178 + 0.768520I$	$7.69936 - 2.64631I$	$0.774092 + 0.704677I$
$u = -0.376178 - 0.768520I$	$7.69936 + 2.64631I$	$0.774092 - 0.704677I$
$u = -1.098220 + 0.328717I$	$-5.25608 + 2.82044I$	$-13.7464 - 4.6104I$
$u = -1.098220 - 0.328717I$	$-5.25608 - 2.82044I$	$-13.7464 + 4.6104I$
$u = -0.983871 + 0.595556I$	$7.60812 + 4.77001I$	$0. - 5.11123I$
$u = -0.983871 - 0.595556I$	$7.60812 - 4.77001I$	$0. + 5.11123I$
$u = 0.592887 + 0.582181I$	$0.88261 - 3.44954I$	$-2.55100 + 7.40984I$
$u = 0.592887 - 0.582181I$	$0.88261 + 3.44954I$	$-2.55100 - 7.40984I$
$u = -1.038830 + 0.540274I$	$0.66178 + 4.72185I$	$0. - 6.22617I$
$u = -1.038830 - 0.540274I$	$0.66178 - 4.72185I$	$0. + 6.22617I$
$u = 1.108380 + 0.429410I$	$0.525380 - 0.893417I$	$-6.66537 + 0.I$
$u = 1.108380 - 0.429410I$	$0.525380 + 0.893417I$	$-6.66537 + 0.I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.117790 + 0.404581I$	$0.34604 + 6.68644I$	$-7.28464 - 6.64124I$
$u = -1.117790 - 0.404581I$	$0.34604 - 6.68644I$	$-7.28464 + 6.64124I$
$u = 0.332464 + 0.722196I$	$-0.29834 + 5.13851I$	$-4.80621 - 6.56976I$
$u = 0.332464 - 0.722196I$	$-0.29834 - 5.13851I$	$-4.80621 + 6.56976I$
$u = -0.491709 + 0.618554I$	$2.27338 - 0.13836I$	$2.37846 + 0.39315I$
$u = -0.491709 - 0.618554I$	$2.27338 + 0.13836I$	$2.37846 - 0.39315I$
$u = -0.378665 + 0.682475I$	$1.76473 - 1.60253I$	$1.33859 + 1.09595I$
$u = -0.378665 - 0.682475I$	$1.76473 + 1.60253I$	$1.33859 - 1.09595I$
$u = 1.102860 + 0.521380I$	$-3.95438 - 4.57454I$	0
$u = 1.102860 - 0.521380I$	$-3.95438 + 4.57454I$	0
$u = -1.093000 + 0.554934I$	$-0.31357 + 6.39150I$	0
$u = -1.093000 - 0.554934I$	$-0.31357 - 6.39150I$	0
$u = 1.114580 + 0.556654I$	$-2.57269 - 10.01430I$	0
$u = 1.114580 - 0.556654I$	$-2.57269 + 10.01430I$	0
$u = -1.114170 + 0.582898I$	$5.52079 + 7.74501I$	0
$u = -1.114170 - 0.582898I$	$5.52079 - 7.74501I$	0
$u = 1.119280 + 0.581631I$	$5.0695 - 14.0551I$	0
$u = 1.119280 - 0.581631I$	$5.0695 + 14.0551I$	0
$u = 0.262528 + 0.616219I$	$-1.62999 + 0.09542I$	$-8.49556 + 0.70141I$
$u = 0.262528 - 0.616219I$	$-1.62999 - 0.09542I$	$-8.49556 - 0.70141I$
$u = 0.022954 + 0.641795I$	$3.51831 - 2.96655I$	$-2.71846 + 2.72944I$
$u = 0.022954 - 0.641795I$	$3.51831 + 2.96655I$	$-2.71846 - 2.72944I$
$u = 0.559370$	-1.01608	-9.59730

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{53} + u^{52} + \cdots + 3u + 1$
c_2	$u^{53} + 25u^{52} + \cdots + 3u + 1$
c_3	$u^{53} + 7u^{52} + \cdots + 41u + 5$
c_4, c_8	$u^{53} - u^{52} + \cdots + u + 1$
c_6	$u^{53} - u^{52} + \cdots + 149u + 97$
c_7, c_9, c_{10}	$u^{53} + 13u^{52} + \cdots + 3u + 1$
c_{11}	$u^{53} + 3u^{52} + \cdots + 213u + 39$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{53} - 25y^{52} + \cdots + 3y - 1$
c_2	$y^{53} + 7y^{52} + \cdots + 3y - 1$
c_3	$y^{53} - 5y^{52} + \cdots + 911y - 25$
c_4, c_8	$y^{53} - 13y^{52} + \cdots + 3y - 1$
c_6	$y^{53} - 17y^{52} + \cdots + 199323y - 9409$
c_7, c_9, c_{10}	$y^{53} + 55y^{52} + \cdots - 5y - 1$
c_{11}	$y^{53} + 11y^{52} + \cdots - 28185y - 1521$