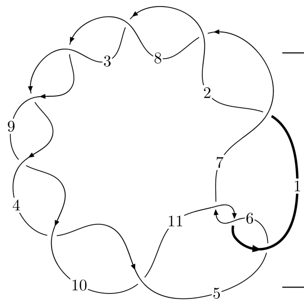
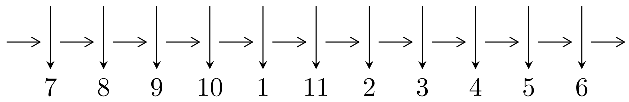
$11a_{364}$ ($K11a_{364}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{12} - u^{11} - 9u^{10} + 8u^9 + 29u^8 - 22u^7 - 40u^6 + 24u^5 + 22u^4 - 7u^3 - 5u^2 - 2u + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 12 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. $I_1^u = \langle u^{12} - u^{11} - 9u^{10} + 8u^9 + 29u^8 - 22u^7 - 40u^6 + 24u^5 + 22u^4 - 7u^3 - 5u^2 - 2u + 1 \rangle$

(i) Arc colorings

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u^7 - 24u^5 + 40u^3 - 16u - 18$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_3 c_4, c_7, c_8 c_9, c_{10}	$u^{12} + u^{11} + \cdots + 2u + 1$
c_5, c_6, c_{11}	$u^{12} - u^{11} + \cdots + 2u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_4, c_7, c_8 c_9, c_{10}	$y^{12} - 19y^{11} + \cdots - 14y + 1$
c_5, c_6, c_{11}	$y^{12} + 9y^{11} + \cdots - 14y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.918662$	-4.32682	-20.8190
$u = \ \ 0.869352 + 0.224925I$	$-0.77801 - 3.34164I$	$-15.4899 + 4.8235I$
$u = \ \ 0.869352 - 0.224925I$	$-0.77801 + 3.34164I$	$-15.4899 - 4.8235I$
$u = -1.45905 + 0.09411I$	$-8.68176 + 4.52432I$	$-16.6614 - 3.3569I$
$u = -1.45905 - 0.09411I$	$-8.68176 - 4.52432I$	$-16.6614 + 3.3569I$
$u = \ \ 1.48275$	-12.5580	-20.3090
$u = -0.265128 + 0.394948I$	$2.75043 + 1.29945I$	$-9.45139 - 4.86548I$
$u = -0.265128 - 0.394948I$	$2.75043 - 1.29945I$	$-9.45139 + 4.86548I$
$u = \ \ 0.291792$	-0.454596	-21.7250
$u = \ \ 1.85950 + 0.02305I$	$18.1845 - 5.1402I$	$-16.9358 + 2.7955I$
$u = \ \ 1.85950 - 0.02305I$	$18.1845 + 5.1402I$	$-16.9358 - 2.7955I$
$u = -1.86522$	14.1283	-20.0700

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_2, c_3 c_4, c_7, c_8 c_9, c_{10}	$u^{12} + u^{11} + \cdots + 2u + 1$
c_5, c_6, c_{11}	$u^{12} - u^{11} + \cdots + 2u + 1$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_3 c_4, c_7, c_8 c_9, c_{10}	$y^{12} - 19y^{11} + \cdots - 14y + 1$
c_5, c_6, c_{11}	$y^{12} + 9y^{11} + \cdots - 14y + 1$