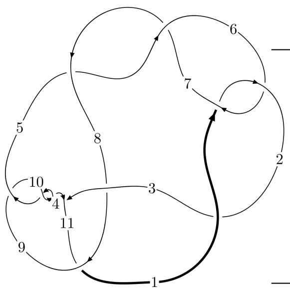
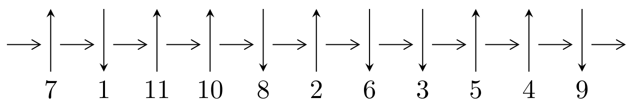
$11a_{210}$ ($K11a_{210}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{36} - u^{35} + \cdots - 2u + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 36 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. $I_1^u = \langle u^{36} - u^{35} + \cdots - 2u + 1 \rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^5 - 2u^3 + u \\ u^5 + 3u^3 + u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} u^{14} + 7u^{12} + 16u^{10} + 11u^8 - 2u^6 + 1 \\ -u^{14} - 8u^{12} - 23u^{10} - 28u^8 - 14u^6 - 4u^4 + u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^7 + 4u^5 + 4u^3 \\ u^9 + 5u^7 + 7u^5 + 2u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^{16} + 9u^{14} + 31u^{12} + 50u^{10} + 37u^8 + 12u^6 + 4u^4 + 1 \\ u^{18} + 10u^{16} + 39u^{14} + 74u^{12} + 71u^{10} + 38u^8 + 18u^6 + 4u^4 + u^2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^{25} + 14u^{23} + \cdots + 6u^3 + u \\ u^{27} + 15u^{25} + \cdots + 3u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^{25} + 14u^{23} + \cdots + 6u^3 + u \\ u^{27} + 15u^{25} + \cdots + 3u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= -4u^{34} + 4u^{33} - 80u^{32} + 76u^{31} - 712u^{30} + 640u^{29} - 3712u^{28} + 3144u^{27} - 12568u^{26} + 9996u^{25} - 29012u^{24} + 21652u^{23} - 46856u^{22} + 33008u^{21} - 53996u^{20} + 36580u^{19} - 45668u^{18} + 30752u^{17} - 29624u^{16} + 20396u^{15} - 15384u^{14} + 10740u^{13} - 6764u^{12} + 4600u^{11} - 2980u^{10} + 1824u^9 - 1312u^8 + 688u^7 - 460u^6 + 268u^5 - 128u^4 + 92u^3 - 20u^2 + 12u - 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{36} + u^{35} + \cdots + u^2 + 1$
c_2, c_5, c_7	$u^{36} + 9u^{35} + \cdots + 2u + 1$
c_3, c_4, c_9 c_{10}	$u^{36} + u^{35} + \cdots + 2u + 1$
c_8	$u^{36} + u^{35} + \cdots + 24u + 5$
c_{11}	$u^{36} - 9u^{35} + \cdots + 8u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{36} + 9y^{35} + \cdots + 2y + 1$
c_2, c_5, c_7	$y^{36} + 37y^{35} + \cdots + 18y + 1$
c_3, c_4, c_9 c_{10}	$y^{36} + 41y^{35} + \cdots + 2y + 1$
c_8	$y^{36} - 3y^{35} + \cdots - 6y + 25$
c_{11}	$y^{36} + y^{35} + \cdots - 30y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \quad 0.039758 + 0.866938I$	$2.43227 - 2.98822I$	$-1.17573 + 2.50595I$
$u = \quad 0.039758 - 0.866938I$	$2.43227 + 2.98822I$	$-1.17573 - 2.50595I$
$u = \quad 0.528849 + 0.662164I$	$5.28964 + 8.99184I$	$2.24371 - 8.34910I$
$u = \quad 0.528849 - 0.662164I$	$5.28964 - 8.99184I$	$2.24371 + 8.34910I$
$u = -0.529498 + 0.643326I$	$5.68597 - 2.74218I$	$3.17354 + 3.44962I$
$u = -0.529498 - 0.643326I$	$5.68597 + 2.74218I$	$3.17354 - 3.44962I$
$u = \quad 0.434530 + 0.674620I$	$-2.03776 + 5.19435I$	$-3.33716 - 9.21025I$
$u = \quad 0.434530 - 0.674620I$	$-2.03776 - 5.19435I$	$-3.33716 + 9.21025I$
$u = \quad 0.279015 + 0.697032I$	$-3.00780 + 0.17019I$	$-7.29367 - 0.75206I$
$u = \quad 0.279015 - 0.697032I$	$-3.00780 - 0.17019I$	$-7.29367 + 0.75206I$
$u = -0.401351 + 0.583059I$	$0.07417 - 1.89235I$	$3.15479 + 4.52320I$
$u = -0.401351 - 0.583059I$	$0.07417 + 1.89235I$	$3.15479 - 4.52320I$
$u = -0.588252 + 0.276624I$	$6.75859 - 1.08065I$	$5.91547 + 2.62482I$
$u = -0.588252 - 0.276624I$	$6.75859 + 1.08065I$	$5.91547 - 2.62482I$
$u = \quad 0.596249 + 0.252176I$	$6.48998 - 5.15115I$	$5.34177 + 2.63886I$
$u = \quad 0.596249 - 0.252176I$	$6.48998 + 5.15115I$	$5.34177 - 2.63886I$
$u = -0.014393 + 1.396600I$	$1.85163 - 3.15004I$	$0. + 2.61659I$
$u = -0.014393 - 1.396600I$	$1.85163 + 3.15004I$	$0. - 2.61659I$
$u = -0.383996 + 0.360002I$	$0.721812 - 0.963189I$	$5.72873 + 5.37633I$
$u = -0.383996 - 0.360002I$	$0.721812 + 0.963189I$	$5.72873 - 5.37633I$
$u = \quad 0.469156 + 0.145748I$	$-0.55346 - 2.03006I$	$1.12004 + 4.04451I$
$u = \quad 0.469156 - 0.145748I$	$-0.55346 + 2.03006I$	$1.12004 - 4.04451I$
$u = -0.04789 + 1.52934I$	$-5.61681 - 2.13861I$	0
$u = -0.04789 - 1.52934I$	$-5.61681 + 2.13861I$	0
$u = -0.11001 + 1.57378I$	$-7.26818 - 3.72706I$	0
$u = -0.11001 - 1.57378I$	$-7.26818 + 3.72706I$	0
$u = -0.15462 + 1.58238I$	$-1.80521 - 5.25682I$	0
$u = -0.15462 - 1.58238I$	$-1.80521 + 5.25682I$	0
$u = \quad 0.15565 + 1.58986I$	$-2.30348 + 11.52240I$	0
$u = \quad 0.15565 - 1.58986I$	$-2.30348 - 11.52240I$	0

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.08438+1.59811I$	$-10.84150+1.55360I$	0
$u=$	$0.08438-1.59811I$	$-10.84150-1.55360I$	0
$u=$	$0.12378+1.59576I$	$-9.75368+7.25706I$	0
$u=$	$0.12378-1.59576I$	$-9.75368-7.25706I$	0
$u=$	$0.01864+1.60315I$	$-5.85535-2.75781I$	0
$u=$	$0.01864-1.60315I$	$-5.85535+2.75781I$	0

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{36} + u^{35} + \cdots + u^2 + 1$
c_2, c_5, c_7	$u^{36} + 9u^{35} + \cdots + 2u + 1$
c_3, c_4, c_9 c_{10}	$u^{36} + u^{35} + \cdots + 2u + 1$
c_8	$u^{36} + u^{35} + \cdots + 24u + 5$
c_{11}	$u^{36} - 9u^{35} + \cdots + 8u + 1$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{36} + 9y^{35} + \cdots + 2y + 1$
c_2, c_5, c_7	$y^{36} + 37y^{35} + \cdots + 18y + 1$
c_3, c_4, c_9 c_{10}	$y^{36} + 41y^{35} + \cdots + 2y + 1$
c_8	$y^{36} - 3y^{35} + \cdots - 6y + 25$
c_{11}	$y^{36} + y^{35} + \cdots - 30y + 1$