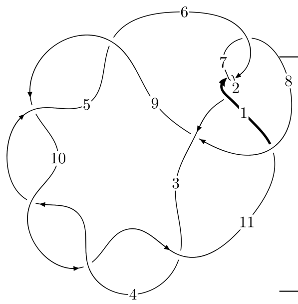
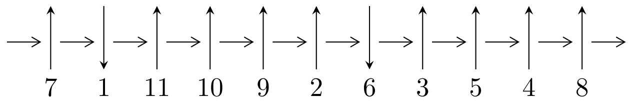
$11a_{211}$ ($K11a_{211}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{33} + u^{32} + \cdots + u - 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 33 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. $I_1^u = \langle u^{33} + u^{32} + \cdots + u - 1 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u^2+1 \\ u^4 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -u \\ u \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^3 \\ u^3+u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^9+2u^7+3u^5+2u^3+u \\ u^{11}+u^9+2u^7+u^5+u^3+u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -u^{21}-4u^{19}+\cdots-2u^3-u \\ -u^{23}-3u^{21}+\cdots-2u^3+u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -u^8-u^6-u^4+1 \\ u^8+2u^6+2u^4+2u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^{20}+3u^{18}+7u^{16}+10u^{14}+10u^{12}+7u^{10}+u^8-2u^6-3u^4-u^2+1 \\ -u^{20}-4u^{18}-10u^{16}-18u^{14}-23u^{12}-24u^{10}-18u^8-10u^6-3u^4 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^{32}-5u^{30}+\cdots-2u^2+1 \\ u^{32}+6u^{30}+\cdots+2u^4+2u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^{32}-5u^{30}+\cdots-2u^2+1 \\ u^{32}+6u^{30}+\cdots+2u^4+2u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes

$= 4u^{31}+4u^{30}+20u^{29}+20u^{28}+72u^{27}+68u^{26}+176u^{25}+164u^{24}+344u^{23}+308u^{22}+536u^{21}+476u^{20}+688u^{19}+600u^{18}+736u^{17}+644u^{16}+644u^{15}+572u^{14}+468u^{13}+424u^{12}+268u^{11}+260u^{10}+120u^9+120u^8+52u^7+48u^6+20u^5+12u^4+20u^3+4u^2+8u+10$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{33} + u^{32} + \cdots + u - 1$
c_2, c_7	$u^{33} + 11u^{32} + \cdots + 5u - 1$
c_3, c_4, c_5 c_9, c_{10}	$u^{33} + u^{32} + \cdots - u - 1$
c_8	$u^{33} + u^{32} + \cdots + 21u - 5$
c_{11}	$u^{33} - 5u^{32} + \cdots + 33u - 7$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{33} + 11y^{32} + \cdots + 5y - 1$
c_2, c_7	$y^{33} + 23y^{32} + \cdots + 41y - 1$
c_3, c_4, c_5 c_9, c_{10}	$y^{33} + 43y^{32} + \cdots + 5y - 1$
c_8	$y^{33} + 3y^{32} + \cdots - 299y - 25$
c_{11}	$y^{33} + 7y^{32} + \cdots - 563y - 49$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.783792 + 0.681225I$	$-0.01786 - 3.59856I$	$5.28807 + 3.52073I$
$u = \quad 0.783792 - 0.681225I$	$-0.01786 + 3.59856I$	$5.28807 - 3.52073I$
$u = -0.101718 + 1.035980I$	$-6.05867 - 3.57865I$	$-2.55817 + 4.87055I$
$u = -0.101718 - 1.035980I$	$-6.05867 + 3.57865I$	$-2.55817 - 4.87055I$
$u = -0.812759 + 0.656775I$	$-9.39854 + 5.15635I$	$4.07009 - 1.99825I$
$u = -0.812759 - 0.656775I$	$-9.39854 - 5.15635I$	$4.07009 + 1.99825I$
$u = \quad 0.064287 + 0.949488I$	$-2.15241 + 1.32489I$	$2.26975 - 5.19264I$
$u = \quad 0.064287 - 0.949488I$	$-2.15241 - 1.32489I$	$2.26975 + 5.19264I$
$u = -0.755741 + 0.727580I$	$3.31791 + 0.71142I$	$11.21363 - 1.67863I$
$u = -0.755741 - 0.727580I$	$3.31791 - 0.71142I$	$11.21363 + 1.67863I$
$u = \quad 0.721580 + 0.791474I$	$1.87533 + 2.23676I$	$7.14983 - 4.95590I$
$u = \quad 0.721580 - 0.791474I$	$1.87533 - 2.23676I$	$7.14983 + 4.95590I$
$u = \quad 0.113164 + 1.080920I$	$-15.7697 + 4.7978I$	$-2.88521 - 3.43471I$
$u = \quad 0.113164 - 1.080920I$	$-15.7697 - 4.7978I$	$-2.88521 + 3.43471I$
$u = -0.564868 + 0.931483I$	$-3.48793 - 2.09474I$	$0.20074 + 2.52182I$
$u = -0.564868 - 0.931483I$	$-3.48793 + 2.09474I$	$0.20074 - 2.52182I$
$u = \quad 0.529302 + 0.992831I$	$-13.31430 + 1.59055I$	$-0.39166 - 2.82040I$
$u = \quad 0.529302 - 0.992831I$	$-13.31430 - 1.59055I$	$-0.39166 + 2.82040I$
$u = -0.767004 + 0.867736I$	$-5.87675 - 2.88651I$	$5.60693 + 2.86051I$
$u = -0.767004 - 0.867736I$	$-5.87675 + 2.88651I$	$5.60693 - 2.86051I$
$u = \quad 0.689725 + 0.931969I$	$1.43951 + 3.16744I$	$6.20217 - 0.82428I$
$u = \quad 0.689725 - 0.931969I$	$1.43951 - 3.16744I$	$6.20217 + 0.82428I$
$u = -0.704961 + 0.976337I$	$2.56175 - 6.26830I$	$9.09411 + 7.22384I$
$u = -0.704961 - 0.976337I$	$2.56175 + 6.26830I$	$9.09411 - 7.22384I$
$u = \quad 0.706642 + 1.006440I$	$-0.99856 + 9.23572I$	$3.44794 - 8.32004I$
$u = \quad 0.706642 - 1.006440I$	$-0.99856 - 9.23572I$	$3.44794 + 8.32004I$
$u = -0.710292 + 1.026450I$	$-10.5163 - 10.8805I$	$2.22808 + 6.70699I$
$u = -0.710292 - 1.026450I$	$-10.5163 + 10.8805I$	$2.22808 - 6.70699I$
$u = \quad 0.648089 + 0.272678I$	$-11.39430 + 2.64374I$	$3.80222 - 2.50255I$
$u = \quad 0.648089 - 0.272678I$	$-11.39430 - 2.64374I$	$3.80222 + 2.50255I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.526368 + 0.248614I$	$-2.09314 - 1.78280I$	$4.63198 + 4.39540I$
$u = -0.526368 - 0.248614I$	$-2.09314 + 1.78280I$	$4.63198 - 4.39540I$
$u = \quad 0.374260$	0.658769	15.2590

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{33} + u^{32} + \cdots + u - 1$
c_2, c_7	$u^{33} + 11u^{32} + \cdots + 5u - 1$
c_3, c_4, c_5 c_9, c_{10}	$u^{33} + u^{32} + \cdots - u - 1$
c_8	$u^{33} + u^{32} + \cdots + 21u - 5$
c_{11}	$u^{33} - 5u^{32} + \cdots + 33u - 7$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{33} + 11y^{32} + \cdots + 5y - 1$
c_2, c_7	$y^{33} + 23y^{32} + \cdots + 41y - 1$
c_3, c_4, c_5 c_9, c_{10}	$y^{33} + 43y^{32} + \cdots + 5y - 1$
c_8	$y^{33} + 3y^{32} + \cdots - 299y - 25$
c_{11}	$y^{33} + 7y^{32} + \cdots - 563y - 49$