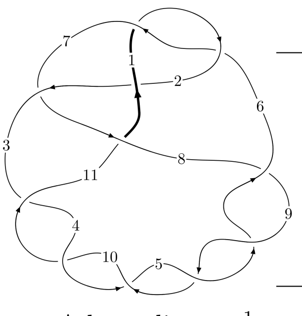
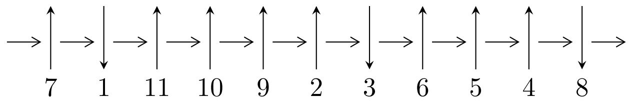
$11a_{195}$ ($K11a_{195}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{26} + u^{25} + \cdots + u + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 26 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. $I_1^u = \langle u^{26} + u^{25} + \cdots + u + 1 \rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^2 + 1 \\ -u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^9 - 6u^7 - 11u^5 - 6u^3 + u \\ u^9 + 5u^7 + 7u^5 + 4u^3 + u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} u^{22} + 15u^{20} + \cdots + 3u^4 + 1 \\ -u^{22} - 14u^{20} + \cdots - 6u^4 + u^2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^9 + 6u^7 + 11u^5 + 6u^3 - u \\ u^{11} + 7u^9 + 16u^7 + 13u^5 + 3u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^9 + 6u^7 + 11u^5 + 6u^3 - u \\ u^{11} + 7u^9 + 16u^7 + 13u^5 + 3u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^{24} - 4u^{23} - 72u^{22} - 68u^{21} - 556u^{20} - 492u^{19} - 2408u^{18} - 1976u^{17} - 6420u^{16} - 4820u^{15} - 10888u^{14} - 7348u^{13} - 11724u^{12} - 6960u^{11} - 7772u^{10} - 3996u^9 - 3012u^8 - 1416u^7 - 688u^6 - 388u^5 - 124u^4 - 84u^3 - 12u^2 - 4u - 2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{26} + u^{25} + \cdots + u + 1$
c_2	$u^{26} + 13u^{25} + \cdots + u + 1$
c_3, c_4, c_5 c_8, c_9, c_{10}	$u^{26} + u^{25} + \cdots + u + 1$
c_7	$u^{26} - u^{25} + \cdots - 15u + 13$
c_{11}	$u^{26} + 5u^{25} + \cdots + 13u + 7$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{26} + 13y^{25} + \cdots + y + 1$
c_2	$y^{26} + y^{25} + \cdots + 13y + 1$
c_3, c_4, c_5 c_8, c_9, c_{10}	$y^{26} + 37y^{25} + \cdots + y + 1$
c_7	$y^{26} - 11y^{25} + \cdots - 771y + 169$
c_{11}	$y^{26} - 7y^{25} + \cdots + 209y + 49$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.077128 + 1.053710I$	$-3.09394 + 2.15610I$	$1.13399 - 4.05651I$
$u = 0.077128 - 1.053710I$	$-3.09394 - 2.15610I$	$1.13399 + 4.05651I$
$u = 0.161363 + 1.198920I$	$-5.09746 + 3.38991I$	$0.31521 - 3.08376I$
$u = 0.161363 - 1.198920I$	$-5.09746 - 3.38991I$	$0.31521 + 3.08376I$
$u = -0.197878 + 1.227700I$	$-7.64978 - 8.20022I$	$-2.78707 + 6.68979I$
$u = -0.197878 - 1.227700I$	$-7.64978 + 8.20022I$	$-2.78707 - 6.68979I$
$u = -0.110529 + 1.259790I$	$-9.26319 - 0.26212I$	$-5.31196 - 0.01260I$
$u = -0.110529 - 1.259790I$	$-9.26319 + 0.26212I$	$-5.31196 + 0.01260I$
$u = -0.244565 + 0.622723I$	$-3.16465 + 0.96048I$	$-3.09934 + 0.95175I$
$u = -0.244565 - 0.622723I$	$-3.16465 - 0.96048I$	$-3.09934 - 0.95175I$
$u = -0.408899 + 0.513910I$	$-2.03162 - 6.10006I$	$0.39307 + 8.69218I$
$u = -0.408899 - 0.513910I$	$-2.03162 + 6.10006I$	$0.39307 - 8.69218I$
$u = 0.348180 + 0.441188I$	$0.20618 + 1.65739I$	$4.39967 - 5.42760I$
$u = 0.348180 - 0.441188I$	$0.20618 - 1.65739I$	$4.39967 + 5.42760I$
$u = -0.456797 + 0.108055I$	$-0.84040 + 3.21915I$	$4.62809 - 2.59939I$
$u = -0.456797 - 0.108055I$	$-0.84040 - 3.21915I$	$4.62809 + 2.59939I$
$u = 0.358117 + 0.227225I$	$0.833642 + 0.761088I$	$8.16561 - 5.13707I$
$u = 0.358117 - 0.227225I$	$0.833642 - 0.761088I$	$8.16561 + 5.13707I$
$u = 0.01146 + 1.75714I$	$-13.35510 + 2.46006I$	$0. - 3.10858I$
$u = 0.01146 - 1.75714I$	$-13.35510 - 2.46006I$	$0. + 3.10858I$
$u = 0.04046 + 1.78541I$	$-16.0177 + 4.2821I$	$0. - 2.02711I$
$u = 0.04046 - 1.78541I$	$-16.0177 - 4.2821I$	$0. + 2.02711I$
$u = -0.05012 + 1.79182I$	$-18.6999 - 9.3134I$	$-3.16767 + 5.53584I$
$u = -0.05012 - 1.79182I$	$-18.6999 + 9.3134I$	$-3.16767 - 5.53584I$
$u = -0.02793 + 1.79884I$	$18.9562 - 0.8960I$	$-5.38672 + 0.I$
$u = -0.02793 - 1.79884I$	$18.9562 + 0.8960I$	$-5.38672 + 0.I$

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{26} + u^{25} + \cdots + u + 1$
c_2	$u^{26} + 13u^{25} + \cdots + u + 1$
c_3, c_4, c_5 c_8, c_9, c_{10}	$u^{26} + u^{25} + \cdots + u + 1$
c_7	$u^{26} - u^{25} + \cdots - 15u + 13$
c_{11}	$u^{26} + 5u^{25} + \cdots + 13u + 7$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{26} + 13y^{25} + \cdots + y + 1$
c_2	$y^{26} + y^{25} + \cdots + 13y + 1$
c_3, c_4, c_5 c_8, c_9, c_{10}	$y^{26} + 37y^{25} + \cdots + y + 1$
c_7	$y^{26} - 11y^{25} + \cdots - 771y + 169$
c_{11}	$y^{26} - 7y^{25} + \cdots + 209y + 49$