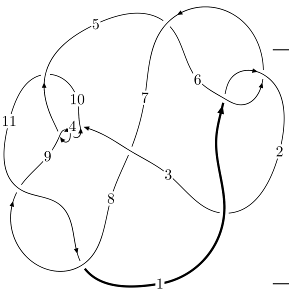
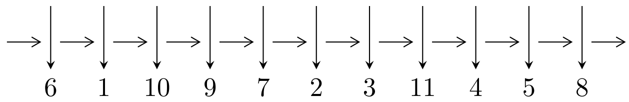
$11a_{192}$ ($K11a_{192}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{48} + u^{47} + \cdots - 4u - 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 48 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. $I_1^u = \langle u^{48} + u^{47} + \cdots - 4u - 1 \rangle$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^3 - 2u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^7 + 4u^5 + 4u^3 \\ -u^7 - 3u^5 - 2u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^{11} - 6u^9 - 12u^7 - 8u^5 - u^3 - 2u \\ u^{11} + 5u^9 + 8u^7 + 3u^5 - u^3 + u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -u^{26} - 13u^{24} + \cdots + 3u^2 + 1 \\ u^{26} + 12u^{24} + \cdots + 4u^4 - 3u^2 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^{13} + 6u^{11} + 13u^9 + 12u^7 + 6u^5 + 4u^3 + u \\ -u^{15} - 7u^{13} - 18u^{11} - 19u^9 - 6u^7 - 2u^5 - 4u^3 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u^{28} - 13u^{26} + \cdots + u^2 + 1 \\ u^{30} + 14u^{28} + \cdots - 8u^4 + u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u^{28} - 13u^{26} + \cdots + u^2 + 1 \\ u^{30} + 14u^{28} + \cdots - 8u^4 + u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u^{47} + 4u^{46} + \cdots - 24u - 22$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{48} - u^{47} + \cdots + 4u^2 - 1$
c_2, c_5	$u^{48} + 15u^{47} + \cdots + 8u + 1$
c_3, c_4, c_9	$u^{48} + u^{47} + \cdots - 4u - 1$
c_7	$u^{48} + u^{47} + \cdots - 282u - 61$
c_8, c_{11}	$u^{48} - 7u^{47} + \cdots - 16u + 1$
c_{10}	$u^{48} - u^{47} + \cdots - 198u - 37$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{48} - 15y^{47} + \cdots - 8y + 1$
c_2, c_5	$y^{48} + 37y^{47} + \cdots - 40y + 1$
c_3, c_4, c_9	$y^{48} + 45y^{47} + \cdots - 8y + 1$
c_7	$y^{48} + 13y^{47} + \cdots - 22428y + 3721$
c_8, c_{11}	$y^{48} + 41y^{47} + \cdots + 200y + 1$
c_{10}	$y^{48} + 17y^{47} + \cdots + 24140y + 1369$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.068968 + 1.151590I$	$2.32852 + 2.32135I$	$-10.38591 + 0.I$
$u = 0.068968 - 1.151590I$	$2.32852 - 2.32135I$	$-10.38591 + 0.I$
$u = -0.683357 + 0.405926I$	$5.21260 + 9.77857I$	$-8.26482 - 8.48475I$
$u = -0.683357 - 0.405926I$	$5.21260 - 9.77857I$	$-8.26482 + 8.48475I$
$u = 0.673489 + 0.415868I$	$6.02949 - 3.89902I$	$-6.63992 + 3.50313I$
$u = 0.673489 - 0.415868I$	$6.02949 + 3.89902I$	$-6.63992 - 3.50313I$
$u = -0.576773 + 0.522352I$	$5.67693 - 5.57732I$	$-6.94459 + 2.40000I$
$u = -0.576773 - 0.522352I$	$5.67693 + 5.57732I$	$-6.94459 - 2.40000I$
$u = 0.589475 + 0.506546I$	$6.39491 - 0.29411I$	$-5.62712 + 2.80614I$
$u = 0.589475 - 0.506546I$	$6.39491 + 0.29411I$	$-5.62712 - 2.80614I$
$u = 0.173044 + 1.237190I$	$-0.64228 - 2.86520I$	0
$u = 0.173044 - 1.237190I$	$-0.64228 + 2.86520I$	0
$u = -0.640543 + 0.369715I$	$-0.68024 + 4.58900I$	$-13.6527 - 7.1281I$
$u = -0.640543 - 0.369715I$	$-0.68024 - 4.58900I$	$-13.6527 + 7.1281I$
$u = 0.603013 + 0.419142I$	$2.62424 - 1.94253I$	$-5.82906 + 3.77516I$
$u = 0.603013 - 0.419142I$	$2.62424 + 1.94253I$	$-5.82906 - 3.77516I$
$u = -0.090373 + 1.285590I$	$3.24763 + 1.60907I$	0
$u = -0.090373 - 1.285590I$	$3.24763 - 1.60907I$	0
$u = 0.218506 + 1.294790I$	$3.84600 - 8.17225I$	0
$u = 0.218506 - 1.294790I$	$3.84600 + 8.17225I$	0
$u = -0.505212 + 0.440988I$	$-0.223689 - 0.846659I$	$-12.11040 + 0.46472I$
$u = -0.505212 - 0.440988I$	$-0.223689 + 0.846659I$	$-12.11040 - 0.46472I$
$u = -0.196581 + 1.315430I$	$4.69521 + 2.82559I$	0
$u = -0.196581 - 1.315430I$	$4.69521 - 2.82559I$	0
$u = 0.627758 + 0.108061I$	$-0.50327 - 5.09371I$	$-14.3561 + 6.8355I$
$u = 0.627758 - 0.108061I$	$-0.50327 + 5.09371I$	$-14.3561 - 6.8355I$
$u = 0.609769$	-4.36789	-20.8280
$u = -0.582317 + 0.152321I$	$0.1388920 - 0.0056976I$	$-12.76408 - 1.77198I$
$u = -0.582317 - 0.152321I$	$0.1388920 + 0.0056976I$	$-12.76408 + 1.77198I$
$u = -0.012644 + 1.408660I$	$7.96823 + 2.83806I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.012644 - 1.408660I$	$7.96823 - 2.83806I$	0
$u = -0.074086 + 0.558977I$	$2.01219 + 2.59814I$	$-6.70685 - 3.63850I$
$u = -0.074086 - 0.558977I$	$2.01219 - 2.59814I$	$-6.70685 + 3.63850I$
$u = -0.20167 + 1.44404I$	$5.75150 + 1.80433I$	0
$u = -0.20167 - 1.44404I$	$5.75150 - 1.80433I$	0
$u = -0.24122 + 1.44657I$	$5.16114 + 7.81947I$	0
$u = -0.24122 - 1.44657I$	$5.16114 - 7.81947I$	0
$u = \quad 0.22417 + 1.45752I$	$8.65974 - 4.98357I$	0
$u = \quad 0.22417 - 1.45752I$	$8.65974 + 4.98357I$	0
$u = -0.25363 + 1.46457I$	$11.2407 + 13.2008I$	0
$u = -0.25363 - 1.46457I$	$11.2407 - 13.2008I$	0
$u = \quad 0.24833 + 1.46680I$	$12.09980 - 7.26678I$	0
$u = \quad 0.24833 - 1.46680I$	$12.09980 + 7.26678I$	0
$u = -0.19351 + 1.48062I$	$12.14030 - 2.80062I$	0
$u = -0.19351 - 1.48062I$	$12.14030 + 2.80062I$	0
$u = \quad 0.20123 + 1.47969I$	$12.80670 - 3.15758I$	0
$u = \quad 0.20123 - 1.47969I$	$12.80670 + 3.15758I$	0
$u = -0.361931$	-0.601903	-16.4760

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{48} - u^{47} + \cdots + 4u^2 - 1$
c_2, c_5	$u^{48} + 15u^{47} + \cdots + 8u + 1$
c_3, c_4, c_9	$u^{48} + u^{47} + \cdots - 4u - 1$
c_7	$u^{48} + u^{47} + \cdots - 282u - 61$
c_8, c_{11}	$u^{48} - 7u^{47} + \cdots - 16u + 1$
c_{10}	$u^{48} - u^{47} + \cdots - 198u - 37$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{48} - 15y^{47} + \cdots - 8y + 1$
c_2, c_5	$y^{48} + 37y^{47} + \cdots - 40y + 1$
c_3, c_4, c_9	$y^{48} + 45y^{47} + \cdots - 8y + 1$
c_7	$y^{48} + 13y^{47} + \cdots - 22428y + 3721$
c_8, c_{11}	$y^{48} + 41y^{47} + \cdots + 200y + 1$
c_{10}	$y^{48} + 17y^{47} + \cdots + 24140y + 1369$