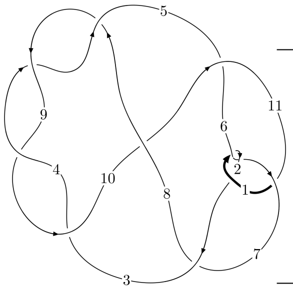
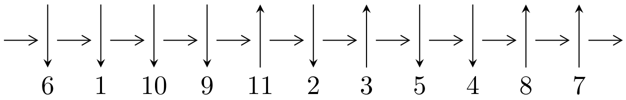
$11a_{190}$ ($K11a_{190}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{42} - u^{41} + \cdots - u + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 42 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. $I_1^u = \langle u^{42} - u^{41} + \cdots - u + 1 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5 - u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u^8 - u^6 + u^4 + 1 \\ -u^{10} + 2u^8 - 3u^6 + 2u^4 - u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^3 \\ -u^3 + u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u^8 - u^6 + u^4 + 1 \\ -u^8 + 2u^6 - 2u^4 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^{26} - 5u^{24} + \cdots + u^2 + 1 \\ -u^{26} + 6u^{24} + \cdots + 2u^4 - u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -u^{39} + 8u^{37} + \cdots + 6u^5 - 2u^3 \\ u^{41} - 9u^{39} + \cdots - 3u^5 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^{21} + 4u^{19} + \cdots + 2u^3 - u \\ u^{23} - 5u^{21} + \cdots - 3u^5 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^{21} + 4u^{19} + \cdots + 2u^3 - u \\ u^{23} - 5u^{21} + \cdots - 3u^5 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= 4u^{40} - 36u^{38} + 4u^{37} + 168u^{36} - 32u^{35} - 516u^{34} + 136u^{33} + 1152u^{32} - 384u^{31} - 1972u^{30} + 796u^{29} + 2700u^{28} - 1276u^{27} - 3092u^{26} + 1648u^{25} + 3116u^{24} - 1780u^{23} - 2872u^{22} + 1668u^{21} + 2424u^{20} - 1388u^{19} - 1832u^{18} + 1020u^{17} + 1244u^{16} - 640u^{15} - 796u^{14} + 324u^{13} + 484u^{12} - 124u^{11} - 256u^{10} + 28u^9 + 112u^8 + 8u^7 - 48u^6 - 20u^5 + 24u^4 + 16u^3 - 8u^2 - 2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{42} - u^{41} + \cdots - u + 1$
c_2	$u^{42} + 19u^{41} + \cdots - u + 1$
c_3, c_4, c_8 c_9	$u^{42} + u^{41} + \cdots + 3u + 1$
c_5, c_7	$u^{42} + u^{41} + \cdots - 12u + 4$
c_{10}	$u^{42} + 13u^{41} + \cdots + 2109u + 283$
c_{11}	$u^{42} - 3u^{41} + \cdots - u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{42} - 19y^{41} + \cdots + y + 1$
c_2	$y^{42} + 9y^{41} + \cdots - 11y + 1$
c_3, c_4, c_8 c_9	$y^{42} + 49y^{41} + \cdots + y + 1$
c_5, c_7	$y^{42} - 35y^{41} + \cdots - 328y + 16$
c_{10}	$y^{42} - 19y^{41} + \cdots - 701527y + 80089$
c_{11}	$y^{42} + y^{41} + \cdots + 37y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.958451 + 0.182027I$	$-1.50976 + 0.22408I$	$-7.80723 - 0.81667I$
$u = -0.958451 - 0.182027I$	$-1.50976 - 0.22408I$	$-7.80723 + 0.81667I$
$u = -0.794065 + 0.558308I$	$8.84617 + 2.25274I$	$4.58162 - 3.46798I$
$u = -0.794065 - 0.558308I$	$8.84617 - 2.25274I$	$4.58162 + 3.46798I$
$u = 1.059210 + 0.106332I$	$0.18706 + 2.88066I$	$-2.91592 - 4.70329I$
$u = 1.059210 - 0.106332I$	$0.18706 - 2.88066I$	$-2.91592 + 4.70329I$
$u = 0.534293 + 0.761914I$	$13.9445 - 3.9233I$	$5.91216 + 2.83813I$
$u = 0.534293 - 0.761914I$	$13.9445 + 3.9233I$	$5.91216 - 2.83813I$
$u = 0.814354 + 0.428559I$	$1.05337 - 1.87068I$	$3.39079 + 4.68483I$
$u = 0.814354 - 0.428559I$	$1.05337 + 1.87068I$	$3.39079 - 4.68483I$
$u = 0.437218 + 0.793916I$	$13.4042 + 6.9529I$	$5.22220 - 3.15637I$
$u = 0.437218 - 0.793916I$	$13.4042 - 6.9529I$	$5.22220 + 3.15637I$
$u = -0.510362 + 0.737623I$	$5.58647 + 2.00252I$	$4.43798 - 4.06646I$
$u = -0.510362 - 0.737623I$	$5.58647 - 2.00252I$	$4.43798 + 4.06646I$
$u = -1.109120 + 0.092741I$	$8.15110 - 4.89812I$	$-0.84749 + 2.79086I$
$u = -1.109120 - 0.092741I$	$8.15110 + 4.89812I$	$-0.84749 - 2.79086I$
$u = -0.440224 + 0.767604I$	$5.20119 - 4.76095I$	$3.47757 + 4.70504I$
$u = -0.440224 - 0.767604I$	$5.20119 + 4.76095I$	$3.47757 - 4.70504I$
$u = -1.052970 + 0.403941I$	$-2.94816 + 1.84155I$	$-7.97014 - 0.12089I$
$u = -1.052970 - 0.403941I$	$-2.94816 - 1.84155I$	$-7.97014 + 0.12089I$
$u = 1.079910 + 0.334044I$	$3.19579 - 0.38496I$	$-4.05769 + 0.70837I$
$u = 1.079910 - 0.334044I$	$3.19579 + 0.38496I$	$-4.05769 - 0.70837I$
$u = 0.460288 + 0.731314I$	$3.06576 + 1.25733I$	$-0.386808 - 0.265317I$
$u = 0.460288 - 0.731314I$	$3.06576 - 1.25733I$	$-0.386808 + 0.265317I$
$u = 1.069990 + 0.454007I$	$-2.58903 - 5.04565I$	$-5.96481 + 8.68441I$
$u = 1.069990 - 0.454007I$	$-2.58903 + 5.04565I$	$-5.96481 - 8.68441I$
$u = -1.096730 + 0.488278I$	$4.21047 + 6.88158I$	$-1.95632 - 6.72572I$
$u = -1.096730 - 0.488278I$	$4.21047 - 6.88158I$	$-1.95632 + 6.72572I$
$u = -1.049770 + 0.605621I$	$3.98383 + 3.11596I$	$2.01311 - 1.17218I$
$u = -1.049770 - 0.605621I$	$3.98383 - 3.11596I$	$2.01311 + 1.17218I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.042540 + 0.627034I$	$12.43060 - 1.33379I$	$3.69918 + 2.21003I$
$u = 1.042540 - 0.627034I$	$12.43060 + 1.33379I$	$3.69918 - 2.21003I$
$u = 1.074510 + 0.592401I$	$1.24809 - 6.31321I$	$-3.41953 + 4.87109I$
$u = 1.074510 - 0.592401I$	$1.24809 + 6.31321I$	$-3.41953 - 4.87109I$
$u = -1.091090 + 0.602467I$	$3.27056 + 9.94153I$	$0.33743 - 9.11948I$
$u = -1.091090 - 0.602467I$	$3.27056 - 9.94153I$	$0.33743 + 9.11948I$
$u = 1.100260 + 0.611942I$	$11.4291 - 12.2349I$	$2.31503 + 7.47393I$
$u = 1.100260 - 0.611942I$	$11.4291 + 12.2349I$	$2.31503 - 7.47393I$
$u = -0.194284 + 0.626683I$	$6.70392 - 2.62174I$	$1.89600 + 2.88322I$
$u = -0.194284 - 0.626683I$	$6.70392 + 2.62174I$	$1.89600 - 2.88322I$
$u = 0.124492 + 0.489748I$	$-0.169198 + 1.278750I$	$-1.95713 - 5.54449I$
$u = 0.124492 - 0.489748I$	$-0.169198 - 1.278750I$	$-1.95713 + 5.54449I$

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{42} - u^{41} + \cdots - u + 1$
c_2	$u^{42} + 19u^{41} + \cdots - u + 1$
c_3, c_4, c_8 c_9	$u^{42} + u^{41} + \cdots + 3u + 1$
c_5, c_7	$u^{42} + u^{41} + \cdots - 12u + 4$
c_{10}	$u^{42} + 13u^{41} + \cdots + 2109u + 283$
c_{11}	$u^{42} - 3u^{41} + \cdots - u + 1$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{42} - 19y^{41} + \cdots + y + 1$
c_2	$y^{42} + 9y^{41} + \cdots - 11y + 1$
c_3, c_4, c_8 c_9	$y^{42} + 49y^{41} + \cdots + y + 1$
c_5, c_7	$y^{42} - 35y^{41} + \cdots - 328y + 16$
c_{10}	$y^{42} - 19y^{41} + \cdots - 701527y + 80089$
c_{11}	$y^{42} + y^{41} + \cdots + 37y + 1$