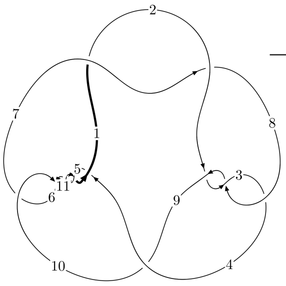
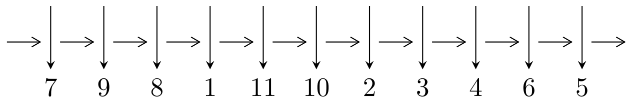
$11a_{359}$ ($K11a_{359}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$a_2 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^5 - 2u^3 - u \\ -u^7 - 3u^5 - 2u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^3 + 2u \\ u^3 + u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^6 - 3u^4 - 2u^2 + 1 \\ -u^6 - 2u^4 - u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u^{16} - 7u^{14} - 19u^{12} - 22u^{10} - 3u^8 + 14u^6 + 6u^4 - 2u^2 + 1 \\ -u^{16} - 6u^{14} - 14u^{12} - 14u^{10} - 2u^8 + 6u^6 + 4u^4 + 2u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -u^{15} - 6u^{13} - 14u^{11} - 14u^9 - 2u^7 + 6u^5 + 4u^3 + 2u \\ -u^{17} - 7u^{15} - 19u^{13} - 22u^{11} - 3u^9 + 14u^7 + 6u^5 - 2u^3 + u \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^{25} - 10u^{23} + \cdots - 8u^3 - u \\ -u^{25} + u^{24} + \cdots - u - 1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^{25} - 10u^{23} + \cdots - 8u^3 - u \\ -u^{25} + u^{24} + \cdots - u - 1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^{24} + 4u^{23} - 40u^{22} + 36u^{21} - 172u^{20} + 136u^{19} - 396u^{18} + 264u^{17} - 472u^{16} + 236u^{15} - 136u^{14} - 20u^{13} + 344u^{12} - 220u^{11} + 384u^{10} - 140u^9 + 48u^8 - 108u^6 + 16u^5 - 40u^4 + 16u^3 - 8u^2 + 16u - 14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7, c_9	$u^{26} + u^{25} + \cdots - 9u - 5$
c_2, c_3, c_8	$u^{26} - u^{25} + \cdots - u - 1$
c_4, c_5, c_6 c_{10}, c_{11}	$u^{26} + u^{25} + \cdots - 3u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7, c_9	$y^{26} - 23y^{25} + \cdots - 151y + 25$
c_2, c_3, c_8	$y^{26} + 21y^{25} + \cdots - 11y + 1$
c_4, c_5, c_6 c_{10}, c_{11}	$y^{26} + 33y^{25} + \cdots - 11y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.841791 + 0.094185I$	$5.20604 - 5.29901I$	$-9.93823 + 3.19957I$
$u = \quad 0.841791 - 0.094185I$	$5.20604 + 5.29901I$	$-9.93823 - 3.19957I$
$u = -0.828402 + 0.050333I$	$-3.49265 + 3.42603I$	$-11.85459 - 4.34345I$
$u = -0.828402 - 0.050333I$	$-3.49265 - 3.42603I$	$-11.85459 + 4.34345I$
$u = \quad 0.829469$	-6.03489	-16.5470
$u = -0.063117 + 1.217600I$	$3.01166 + 1.26256I$	$-8.17654 - 5.12241I$
$u = -0.063117 - 1.217600I$	$3.01166 - 1.26256I$	$-8.17654 + 5.12241I$
$u = \quad 0.392131 + 1.168430I$	$8.49921 + 0.85694I$	$-6.81756 + 0.45709I$
$u = \quad 0.392131 - 1.168430I$	$8.49921 - 0.85694I$	$-6.81756 - 0.45709I$
$u = -0.370693 + 1.223000I$	$0.117817 + 0.889406I$	$-8.45807 + 0.89318I$
$u = -0.370693 - 1.223000I$	$0.117817 - 0.889406I$	$-8.45807 - 0.89318I$
$u = \quad 0.373903 + 1.269520I$	$-2.09387 - 4.32460I$	$-12.48733 + 3.68089I$
$u = \quad 0.373903 - 1.269520I$	$-2.09387 + 4.32460I$	$-12.48733 - 3.68089I$
$u = \quad 0.116826 + 1.320420I$	$6.90824 - 2.96972I$	$-1.89605 + 4.34441I$
$u = \quad 0.116826 - 1.320420I$	$6.90824 + 2.96972I$	$-1.89605 - 4.34441I$
$u = -0.475175 + 0.446398I$	$10.68300 + 1.72593I$	$-6.44509 - 3.70709I$
$u = -0.475175 - 0.446398I$	$10.68300 - 1.72593I$	$-6.44509 + 3.70709I$
$u = -0.371528 + 1.305530I$	$0.74252 + 7.74244I$	$-7.42357 - 6.92511I$
$u = -0.371528 - 1.305530I$	$0.74252 - 7.74244I$	$-7.42357 + 6.92511I$
$u = -0.127500 + 1.375760I$	$16.3951 + 3.6931I$	$-1.57713 - 3.06120I$
$u = -0.127500 - 1.375760I$	$16.3951 - 3.6931I$	$-1.57713 + 3.06120I$
$u = \quad 0.374153 + 1.333360I$	$9.68283 - 9.67188I$	$-5.67938 + 5.45420I$
$u = \quad 0.374153 - 1.333360I$	$9.68283 + 9.67188I$	$-5.67938 - 5.45420I$
$u = \quad 0.373827 + 0.329514I$	$1.88313 - 1.28751I$	$-6.75058 + 5.74185I$
$u = \quad 0.373827 - 0.329514I$	$1.88313 + 1.28751I$	$-6.75058 - 5.74185I$
$u = -0.301902$	-0.485500	-20.4450

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_7, c_9	$u^{26} + u^{25} + \cdots - 9u - 5$
c_2, c_3, c_8	$u^{26} - u^{25} + \cdots - u - 1$
c_4, c_5, c_6 c_{10}, c_{11}	$u^{26} + u^{25} + \cdots - 3u - 1$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7, c_9	$y^{26} - 23y^{25} + \cdots - 151y + 25$
c_2, c_3, c_8	$y^{26} + 21y^{25} + \cdots - 11y + 1$
c_4, c_5, c_6 c_{10}, c_{11}	$y^{26} + 33y^{25} + \cdots - 11y + 1$