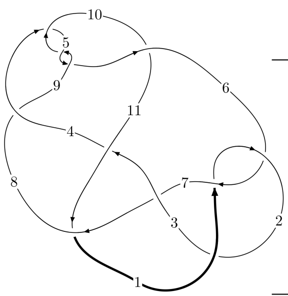
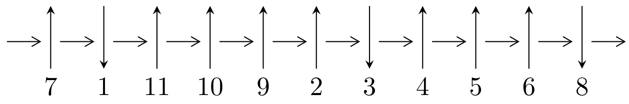
$11a_{183}$ ($K11a_{183}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{57} + u^{56} + \cdots + u + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 57 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. $I_1^u = \langle u^{57} + u^{56} + \cdots + u + 1 \rangle$

(i) Arc colorings

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^3 + 2u \\ u^3 + u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -u^{10} - 5u^8 - 8u^6 - 3u^4 + 3u^2 + 1 \\ -u^{10} - 4u^8 - 5u^6 + 3u^2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^5 - 2u^3 - u \\ -u^7 - 3u^5 - 2u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^{15} + 6u^{13} + 14u^{11} + 14u^9 + 2u^7 - 6u^5 - 2u^3 + 2u \\ u^{17} + 7u^{15} + 19u^{13} + 22u^{11} + 3u^9 - 14u^7 - 6u^5 + 4u^3 + u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} u^{42} + 17u^{40} + \cdots + u^2 + 1 \\ u^{44} + 18u^{42} + \cdots - 5u^4 + 2u^2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^{27} - 12u^{25} + \cdots + 2u^5 + 5u^3 \\ -u^{27} - 11u^{25} + \cdots + u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^{27} - 12u^{25} + \cdots + 2u^5 + 5u^3 \\ -u^{27} - 11u^{25} + \cdots + u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 4u^{56} + 4u^{55} + \cdots - 4u^2 + 6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{57} + u^{56} + \cdots - u - 1$
c_2	$u^{57} + 27u^{56} + \cdots + u - 1$
c_3	$u^{57} + 7u^{56} + \cdots + 49u + 5$
c_4, c_5, c_9	$u^{57} - u^{56} + \cdots + u - 1$
c_7	$u^{57} - u^{56} + \cdots + 231u - 53$
c_8, c_{10}	$u^{57} + u^{56} + \cdots - 29u - 17$
c_{11}	$u^{57} + 5u^{56} + \cdots - 264u - 112$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{57} + 27y^{56} + \cdots + y - 1$
c_2	$y^{57} + 7y^{56} + \cdots - 3y - 1$
c_3	$y^{57} + 3y^{56} + \cdots - 519y - 25$
c_4, c_5, c_9	$y^{57} + 47y^{56} + \cdots + y - 1$
c_7	$y^{57} - 13y^{56} + \cdots + 82617y - 2809$
c_8, c_{10}	$y^{57} - 37y^{56} + \cdots - 1267y - 289$
c_{11}	$y^{57} + 15y^{56} + \cdots - 381664y - 12544$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.277649 + 1.138010I$	$-2.98923 - 1.15216I$	0
$u = -0.277649 - 1.138010I$	$-2.98923 + 1.15216I$	0
$u = -0.343977 + 1.120270I$	$-0.58525 + 6.08343I$	0
$u = -0.343977 - 1.120270I$	$-0.58525 - 6.08343I$	0
$u = -0.804549 + 0.125513I$	$2.43881 - 10.27360I$	$7.12723 + 7.98252I$
$u = -0.804549 - 0.125513I$	$2.43881 + 10.27360I$	$7.12723 - 7.98252I$
$u = \quad 0.337618 + 1.140540I$	$1.53395 - 1.08977I$	0
$u = \quad 0.337618 - 1.140540I$	$1.53395 + 1.08977I$	0
$u = \quad 0.799720 + 0.113827I$	$4.65256 + 5.23405I$	$10.45155 - 4.02810I$
$u = \quad 0.799720 - 0.113827I$	$4.65256 - 5.23405I$	$10.45155 + 4.02810I$
$u = \quad 0.797777 + 0.076863I$	$5.78308 + 2.96634I$	$12.01643 - 3.84738I$
$u = \quad 0.797777 - 0.076863I$	$5.78308 - 2.96634I$	$12.01643 + 3.84738I$
$u = -0.798784 + 0.053217I$	$4.63483 + 1.87363I$	$10.12440 - 2.27509I$
$u = -0.798784 - 0.053217I$	$4.63483 - 1.87363I$	$10.12440 + 2.27509I$
$u = -0.771308 + 0.122509I$	$0.04467 - 2.73028I$	$4.01382 + 2.71873I$
$u = -0.771308 - 0.122509I$	$0.04467 + 2.73028I$	$4.01382 - 2.71873I$
$u = \quad 0.342759 + 1.189140I$	$2.38357 + 1.16168I$	0
$u = \quad 0.342759 - 1.189140I$	$2.38357 - 1.16168I$	0
$u = -0.348811 + 1.212550I$	$1.07430 - 6.01691I$	0
$u = -0.348811 - 1.212550I$	$1.07430 + 6.01691I$	0
$u = -0.052037 + 1.291330I$	$-3.68835 - 1.96306I$	0
$u = -0.052037 - 1.291330I$	$-3.68835 + 1.96306I$	0
$u = -0.266975 + 1.304600I$	$-2.86692 - 3.28224I$	0
$u = -0.266975 - 1.304600I$	$-2.86692 + 3.28224I$	0
$u = \quad 0.236806 + 1.324490I$	$-5.56866 - 0.84775I$	0
$u = \quad 0.236806 - 1.324490I$	$-5.56866 + 0.84775I$	0
$u = -0.346838 + 1.301460I$	$0.40457 - 2.25231I$	0
$u = -0.346838 - 1.301460I$	$0.40457 + 2.25231I$	0
$u = \quad 0.634619 + 0.140548I$	$-1.62790 + 3.37240I$	$3.27495 - 5.30685I$
$u = \quad 0.634619 - 0.140548I$	$-1.62790 - 3.37240I$	$3.27495 + 5.30685I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.638377$	1.27831	8.28660
$u=\ \ 0.346920+1.317510I$	$1.41577+7.09232I$	0
$u=\ \ 0.346920-1.317510I$	$1.41577-7.09232I$	0
$u=\ \ 0.277893+1.335410I$	$-6.25104+6.75305I$	0
$u=\ \ 0.277893-1.335410I$	$-6.25104-6.75305I$	0
$u=\ \ 0.337361+0.533102I$	$-1.72047+6.62089I$	$2.54306-8.39817I$
$u=\ \ 0.337361-0.533102I$	$-1.72047-6.62089I$	$2.54306+8.39817I$
$u=-0.058345+1.369800I$	$-5.26507-3.02226I$	0
$u=-0.058345-1.369800I$	$-5.26507+3.02226I$	0
$u=-0.331323+1.341910I$	$-4.56299-6.72032I$	0
$u=-0.331323-1.341910I$	$-4.56299+6.72032I$	0
$u=\ \ 0.032432+1.383040I$	$-9.34182+0.07828I$	0
$u=\ \ 0.032432-1.383040I$	$-9.34182-0.07828I$	0
$u=\ \ 0.346087+1.339690I$	$0.08340+9.36804I$	0
$u=\ \ 0.346087-1.339690I$	$0.08340-9.36804I$	0
$u=\ \ 0.063733+1.386370I$	$-7.68595+7.77424I$	0
$u=\ \ 0.063733-1.386370I$	$-7.68595-7.77424I$	0
$u=-0.347692+1.346470I$	$-2.1926-14.4304I$	0
$u=-0.347692-1.346470I$	$-2.1926+14.4304I$	0
$u=\ \ 0.192189+0.576599I$	$-3.37572-0.51768I$	$-1.48190-0.98551I$
$u=\ \ 0.192189-0.576599I$	$-3.37572+0.51768I$	$-1.48190+0.98551I$
$u=-0.310416+0.472368I$	$0.42908-1.95168I$	$6.05217+4.83311I$
$u=-0.310416-0.472368I$	$0.42908+1.95168I$	$6.05217-4.83311I$
$u=\ \ 0.499130+0.251121I$	$-0.85109-3.57978I$	$5.03586+1.38706I$
$u=\ \ 0.499130-0.251121I$	$-0.85109+3.57978I$	$5.03586-1.38706I$
$u=-0.367153+0.287513I$	$0.979056-0.679070I$	$8.79507+4.86357I$
$u=-0.367153-0.287513I$	$0.979056+0.679070I$	$8.79507-4.86357I$

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{57} + u^{56} + \cdots - u - 1$
c_2	$u^{57} + 27u^{56} + \cdots + u - 1$
c_3	$u^{57} + 7u^{56} + \cdots + 49u + 5$
c_4, c_5, c_9	$u^{57} - u^{56} + \cdots + u - 1$
c_7	$u^{57} - u^{56} + \cdots + 231u - 53$
c_8, c_{10}	$u^{57} + u^{56} + \cdots - 29u - 17$
c_{11}	$u^{57} + 5u^{56} + \cdots - 264u - 112$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{57} + 27y^{56} + \cdots + y - 1$
c_2	$y^{57} + 7y^{56} + \cdots - 3y - 1$
c_3	$y^{57} + 3y^{56} + \cdots - 519y - 25$
c_4, c_5, c_9	$y^{57} + 47y^{56} + \cdots + y - 1$
c_7	$y^{57} - 13y^{56} + \cdots + 82617y - 2809$
c_8, c_{10}	$y^{57} - 37y^{56} + \cdots - 1267y - 289$
c_{11}	$y^{57} + 15y^{56} + \cdots - 381664y - 12544$