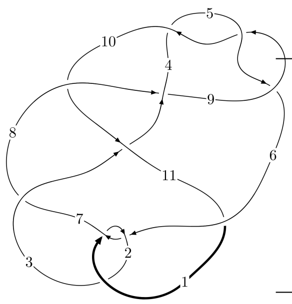
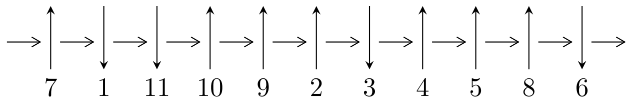
$11a_{185}$ $(K11a_{185})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{54} + u^{53} + \cdots + u + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 54 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. $I_1^u = \langle u^{54} + u^{53} + \cdots + u + 1 \rangle$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5 + u^3 + u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^6 - u^4 + 1 \\ u^8 + 2u^6 + 2u^4 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} u^3 \\ u^3 + u \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -u^{11} - 2u^9 - 2u^7 - u^3 \\ -u^{11} - 3u^9 - 4u^7 - u^5 + u^3 + u \end{pmatrix}$$
$$a_9 = \begin{pmatrix} u^{30} + 7u^{28} + \cdots - 2u^{12} + 1 \\ u^{30} + 8u^{28} + \cdots + 4u^6 - u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -u^{47} - 12u^{45} + \cdots - 20u^9 - 8u^7 \\ u^{49} + 13u^{47} + \cdots - 2u^5 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^{17} - 4u^{15} - 7u^{13} - 4u^{11} + 3u^9 + 6u^7 + 2u^5 - u \\ u^{19} + 5u^{17} + 12u^{15} + 15u^{13} + 9u^{11} - u^9 - 4u^7 - 2u^5 + u^3 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^{17} - 4u^{15} - 7u^{13} - 4u^{11} + 3u^9 + 6u^7 + 2u^5 - u \\ u^{19} + 5u^{17} + 12u^{15} + 15u^{13} + 9u^{11} - u^9 - 4u^7 - 2u^5 + u^3 + u \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^{52} - 4u^{51} + \cdots + 4u^2 - 2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{54} + u^{53} + \cdots + u + 1$
c_2	$u^{54} + 29u^{53} + \cdots - u + 1$
c_3	$u^{54} - 7u^{53} + \cdots - 47u + 5$
c_4, c_5, c_9	$u^{54} - u^{53} + \cdots - u + 1$
c_7, c_{11}	$u^{54} - u^{53} + \cdots + u + 1$
c_8	$u^{54} + u^{53} + \cdots + 11u + 1$
c_{10}	$u^{54} + 11u^{53} + \cdots + 1951u + 187$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{54} + 29y^{53} + \cdots - y + 1$
c_2	$y^{54} - 7y^{53} + \cdots - 5y + 1$
c_3	$y^{54} - 3y^{53} + \cdots + 631y + 25$
c_4, c_5, c_9	$y^{54} + 49y^{53} + \cdots - y + 1$
c_7, c_{11}	$y^{54} - 43y^{53} + \cdots - 97y + 1$
c_8	$y^{54} + 5y^{53} + \cdots - 49y + 1$
c_{10}	$y^{54} + 21y^{53} + \cdots + 184179y + 34969$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.526458 + 0.850149I$	$1.84506 - 5.20730I$	$6.07211 + 8.44255I$
$u = -0.526458 - 0.850149I$	$1.84506 + 5.20730I$	$6.07211 - 8.44255I$
$u = 0.063963 + 0.969473I$	$-2.01199 + 1.57241I$	$-2.93647 - 4.70910I$
$u = 0.063963 - 0.969473I$	$-2.01199 - 1.57241I$	$-2.93647 + 4.70910I$
$u = 0.542026 + 0.876210I$	$-3.38874 + 8.60756I$	$0.88746 - 8.62489I$
$u = 0.542026 - 0.876210I$	$-3.38874 - 8.60756I$	$0.88746 + 8.62489I$
$u = -0.068795 + 1.043570I$	$-7.55344 - 4.33327I$	$-6.71453 + 3.78697I$
$u = -0.068795 - 1.043570I$	$-7.55344 + 4.33327I$	$-6.71453 - 3.78697I$
$u = -0.404606 + 0.965250I$	$-5.19453 - 0.85164I$	$-2.69916 + 2.79194I$
$u = -0.404606 - 0.965250I$	$-5.19453 + 0.85164I$	$-2.69916 - 2.79194I$
$u = 0.459955 + 0.798537I$	$0.23556 + 1.92632I$	$2.54464 - 3.58852I$
$u = 0.459955 - 0.798537I$	$0.23556 - 1.92632I$	$2.54464 + 3.58852I$
$u = 0.514528 + 0.758613I$	$0.15792 + 2.10554I$	$4.75076 - 4.16265I$
$u = 0.514528 - 0.758613I$	$0.15792 - 2.10554I$	$4.75076 + 4.16265I$
$u = -0.521169 + 0.661679I$	$2.37968 + 0.93113I$	$8.32580 - 1.37232I$
$u = -0.521169 - 0.661679I$	$2.37968 - 0.93113I$	$8.32580 + 1.37232I$
$u = 0.555404 + 0.618983I$	$-2.66786 - 4.19841I$	$2.85328 + 2.26313I$
$u = 0.555404 - 0.618983I$	$-2.66786 + 4.19841I$	$2.85328 - 2.26313I$
$u = -0.812471 + 0.137850I$	$-6.92259 + 9.00910I$	$-0.82614 - 5.72677I$
$u = -0.812471 - 0.137850I$	$-6.92259 - 9.00910I$	$-0.82614 + 5.72677I$
$u = -0.409939 + 1.110810I$	$-5.37080 - 0.77260I$	0
$u = -0.409939 - 1.110810I$	$-5.37080 + 0.77260I$	0
$u = 0.803336 + 0.074667I$	$-8.69949 + 0.21899I$	$-3.12382 - 0.07866I$
$u = 0.803336 - 0.074667I$	$-8.69949 - 0.21899I$	$-3.12382 + 0.07866I$
$u = 0.793006 + 0.135744I$	$-1.35714 - 5.52569I$	$3.45218 + 5.82582I$
$u = 0.793006 - 0.135744I$	$-1.35714 + 5.52569I$	$3.45218 - 5.82582I$
$u = 0.465718 + 1.132140I$	$-1.40488 + 3.87836I$	0
$u = 0.465718 - 1.132140I$	$-1.40488 - 3.87836I$	0
$u = -0.768273 + 0.105402I$	$-2.42732 + 1.73641I$	$0.699777 + 0.008860I$
$u = -0.768273 - 0.105402I$	$-2.42732 - 1.73641I$	$0.699777 - 0.008860I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.492150 + 1.152340I$	$-4.72150 - 7.14315I$	0
$u = -0.492150 - 1.152340I$	$-4.72150 + 7.14315I$	0
$u = -0.403427 + 1.196670I$	$-6.22025 - 2.29095I$	0
$u = -0.403427 - 1.196670I$	$-6.22025 + 2.29095I$	0
$u = \quad 0.382721 + 1.204180I$	$-5.34368 - 1.56137I$	0
$u = \quad 0.382721 - 1.204180I$	$-5.34368 + 1.56137I$	0
$u = -0.378306 + 1.216650I$	$-11.00630 + 4.98743I$	0
$u = -0.378306 - 1.216650I$	$-11.00630 - 4.98743I$	0
$u = \quad 0.415619 + 1.215680I$	$-12.53210 + 4.46314I$	0
$u = \quad 0.415619 - 1.215680I$	$-12.53210 - 4.46314I$	0
$u = -0.494467 + 1.187320I$	$-5.57287 - 6.38943I$	0
$u = -0.494467 - 1.187320I$	$-5.57287 + 6.38943I$	0
$u = -0.688011 + 0.172752I$	$-1.90661 + 2.65629I$	$2.99397 - 3.57576I$
$u = -0.688011 - 0.172752I$	$-1.90661 - 2.65629I$	$2.99397 + 3.57576I$
$u = \quad 0.508429 + 1.190650I$	$-4.45647 + 10.31740I$	0
$u = \quad 0.508429 - 1.190650I$	$-4.45647 - 10.31740I$	0
$u = \quad 0.486868 + 1.204310I$	$-12.02490 + 4.47153I$	0
$u = \quad 0.486868 - 1.204310I$	$-12.02490 - 4.47153I$	0
$u = -0.513281 + 1.197090I$	$-10.0524 - 13.8722I$	0
$u = -0.513281 - 1.197090I$	$-10.0524 + 13.8722I$	0
$u = -0.553091 + 0.375407I$	$-3.44062 - 3.02821I$	$2.33743 + 2.90410I$
$u = -0.553091 - 0.375407I$	$-3.44062 + 3.02821I$	$2.33743 - 2.90410I$
$u = \quad 0.542871 + 0.222612I$	$1.223040 + 0.207996I$	$8.65252 - 1.10768I$
$u = \quad 0.542871 - 0.222612I$	$1.223040 - 0.207996I$	$8.65252 + 1.10768I$

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^{54} + u^{53} + \cdots + u + 1$
c_2	$u^{54} + 29u^{53} + \cdots - u + 1$
c_3	$u^{54} - 7u^{53} + \cdots - 47u + 5$
c_4, c_5, c_9	$u^{54} - u^{53} + \cdots - u + 1$
c_7, c_{11}	$u^{54} - u^{53} + \cdots + u + 1$
c_8	$u^{54} + u^{53} + \cdots + 11u + 1$
c_{10}	$u^{54} + 11u^{53} + \cdots + 1951u + 187$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^{54} + 29y^{53} + \cdots - y + 1$
c_2	$y^{54} - 7y^{53} + \cdots - 5y + 1$
c_3	$y^{54} - 3y^{53} + \cdots + 631y + 25$
c_4, c_5, c_9	$y^{54} + 49y^{53} + \cdots - y + 1$
c_7, c_{11}	$y^{54} - 43y^{53} + \cdots - 97y + 1$
c_8	$y^{54} + 5y^{53} + \cdots - 49y + 1$
c_{10}	$y^{54} + 21y^{53} + \cdots + 184179y + 34969$