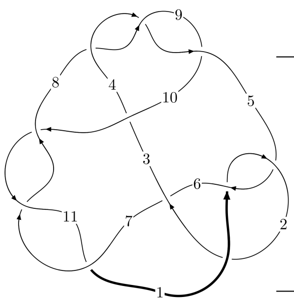
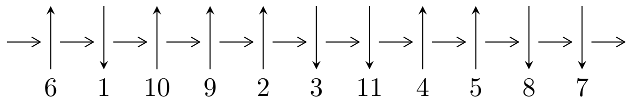
$11a_{90}$ $(K11a_{90})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle u^{43} - u^{42} + \cdots + u^2 + 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 43 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. $\boldsymbol{I_1^u = \langle u^{43} - u^{42} + \cdots + u^2 + 1 \rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^4 + u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^5 + 2u^3 - u \\ u^7 - 3u^5 + 2u^3 + u \end{pmatrix}$$
$$a_7 = \begin{pmatrix} u^8 - 3u^6 + u^4 + 2u^2 + 1 \\ -u^8 + 4u^6 - 4u^4 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u^{12} + 5u^{10} - 7u^8 + 2u^4 + 3u^2 + 1 \\ u^{12} - 6u^{10} + 12u^8 - 8u^6 + u^4 - 2u^2 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} u^{31} - 14u^{29} + \cdots + 20u^5 + 8u^3 \\ -u^{31} + 15u^{29} + \cdots - 8u^5 + u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^{20} - 9u^{18} + \cdots + 3u^2 + 1 \\ -u^{22} + 10u^{20} + \cdots - 10u^4 - u^2 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} u^{20} - 9u^{18} + \cdots + 3u^2 + 1 \\ -u^{22} + 10u^{20} + \cdots - 10u^4 - u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^{41} + 80u^{39} + \cdots + 8u + 2$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{43} - u^{42} + \cdots + 2u - 1$
c_2	$u^{43} + 19u^{42} + \cdots - 2u - 1$
c_3	$u^{43} - 3u^{42} + \cdots - 165u + 88$
c_4, c_8, c_9	$u^{43} + u^{42} + \cdots - u^2 - 1$
c_6	$u^{43} + u^{42} + \cdots - 3u - 2$
c_7, c_{10}, c_{11}	$u^{43} - 5u^{42} + \cdots + 52u - 7$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{43} + 19y^{42} + \cdots - 2y - 1$
c_2	$y^{43} + 11y^{42} + \cdots - 10y - 1$
c_3	$y^{43} - 21y^{42} + \cdots + 171017y - 7744$
c_4, c_8, c_9	$y^{43} - 41y^{42} + \cdots - 2y - 1$
c_6	$y^{43} + 3y^{42} + \cdots - 163y - 4$
c_7, c_{10}, c_{11}	$y^{43} + 47y^{42} + \cdots - 1090y - 49$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.450941 + 0.686624I$	$5.35054 - 9.10731I$	$3.33084 + 7.84073I$
$u = -0.450941 - 0.686624I$	$5.35054 + 9.10731I$	$3.33084 - 7.84073I$
$u = 0.463007 + 0.675614I$	$7.17544 + 3.78029I$	$6.09678 - 3.29694I$
$u = 0.463007 - 0.675614I$	$7.17544 - 3.78029I$	$6.09678 + 3.29694I$
$u = -0.512233 + 0.637578I$	$5.58121 + 4.70276I$	$4.01683 - 1.90768I$
$u = -0.512233 - 0.637578I$	$5.58121 - 4.70276I$	$4.01683 + 1.90768I$
$u = 1.180680 + 0.070474I$	$-0.12031 + 3.39708I$	$-1.05977 - 4.64882I$
$u = 1.180680 - 0.070474I$	$-0.12031 - 3.39708I$	$-1.05977 + 4.64882I$
$u = 0.496416 + 0.648800I$	$7.30167 + 0.61667I$	$6.46762 - 2.84316I$
$u = 0.496416 - 0.648800I$	$7.30167 - 0.61667I$	$6.46762 + 2.84316I$
$u = -0.447772 + 0.632332I$	$1.69784 - 2.06717I$	$0.16713 + 3.29698I$
$u = -0.447772 - 0.632332I$	$1.69784 + 2.06717I$	$0.16713 - 3.29698I$
$u = -1.25034$	2.53757	3.48810
$u = -1.304990 + 0.171072I$	$1.15199 - 1.78064I$	0
$u = -1.304990 - 0.171072I$	$1.15199 + 1.78064I$	0
$u = 0.206694 + 0.605749I$	$-2.00685 + 5.68843I$	$-2.34470 - 8.72951I$
$u = 0.206694 - 0.605749I$	$-2.00685 - 5.68843I$	$-2.34470 + 8.72951I$
$u = -1.356100 + 0.215927I$	$2.91900 - 8.67200I$	0
$u = -1.356100 - 0.215927I$	$2.91900 + 8.67200I$	0
$u = 1.366840 + 0.185574I$	$5.03487 + 4.10356I$	0
$u = 1.366840 - 0.185574I$	$5.03487 - 4.10356I$	0
$u = 1.403260 + 0.118432I$	$6.22218 + 2.77486I$	0
$u = 1.403260 - 0.118432I$	$6.22218 - 2.77486I$	0
$u = -1.411730 + 0.074872I$	$5.35002 + 1.81991I$	0
$u = -1.411730 - 0.074872I$	$5.35002 - 1.81991I$	0
$u = 0.089033 + 0.575299I$	$-3.14805 - 0.90482I$	$-6.51420 - 0.21846I$
$u = 0.089033 - 0.575299I$	$-3.14805 + 0.90482I$	$-6.51420 + 0.21846I$
$u = -0.221219 + 0.523394I$	$0.01425 - 1.49737I$	$1.74832 + 5.31506I$
$u = -0.221219 - 0.523394I$	$0.01425 + 1.49737I$	$1.74832 - 5.31506I$
$u = 0.504381 + 0.191157I$	$-0.50303 - 2.82096I$	$3.24990 + 2.85228I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.504381 - 0.191157I$	$-0.50303 + 2.82096I$	$3.24990 - 2.85228I$
$u = 1.47320 + 0.22968I$	$7.89812 + 5.22510I$	0
$u = 1.47320 - 0.22968I$	$7.89812 - 5.22510I$	0
$u = -0.353298 + 0.351162I$	$0.686131 - 1.038760I$	$5.50415 + 5.16099I$
$u = -0.353298 - 0.351162I$	$0.686131 + 1.038760I$	$5.50415 - 5.16099I$
$u = 1.48315 + 0.24777I$	$11.6071 + 12.5188I$	0
$u = 1.48315 - 0.24777I$	$11.6071 - 12.5188I$	0
$u = -1.48567 + 0.24134I$	$13.4835 - 7.1271I$	0
$u = -1.48567 - 0.24134I$	$13.4835 + 7.1271I$	0
$u = -1.49208 + 0.22410I$	$13.7502 - 3.7932I$	0
$u = -1.49208 - 0.22410I$	$13.7502 + 3.7932I$	0
$u = 1.49455 + 0.21615I$	$12.09380 - 1.60453I$	0
$u = 1.49455 - 0.21615I$	$12.09380 + 1.60453I$	0

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{43} - u^{42} + \cdots + 2u - 1$
c_2	$u^{43} + 19u^{42} + \cdots - 2u - 1$
c_3	$u^{43} - 3u^{42} + \cdots - 165u + 88$
c_4, c_8, c_9	$u^{43} + u^{42} + \cdots - u^2 - 1$
c_6	$u^{43} + u^{42} + \cdots - 3u - 2$
c_7, c_{10}, c_{11}	$u^{43} - 5u^{42} + \cdots + 52u - 7$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{43} + 19y^{42} + \cdots - 2y - 1$
c_2	$y^{43} + 11y^{42} + \cdots - 10y - 1$
c_3	$y^{43} - 21y^{42} + \cdots + 171017y - 7744$
c_4, c_8, c_9	$y^{43} - 41y^{42} + \cdots - 2y - 1$
c_6	$y^{43} + 3y^{42} + \cdots - 163y - 4$
c_7, c_{10}, c_{11}	$y^{43} + 47y^{42} + \cdots - 1090y - 49$