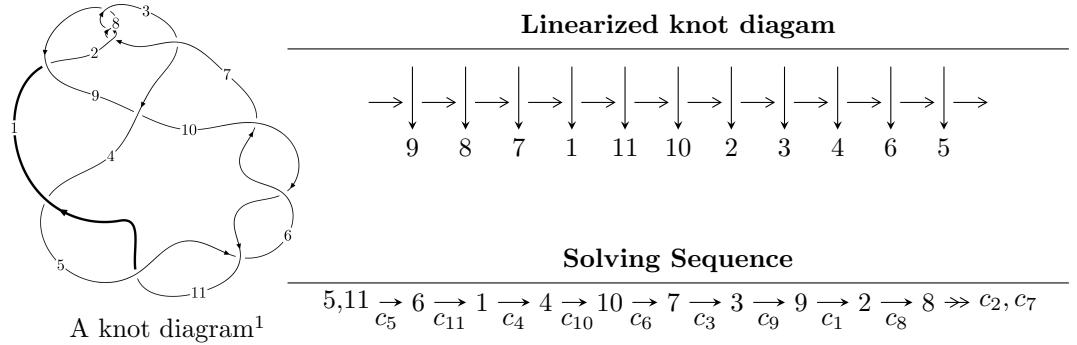


$11a_{360}$ ($K11a_{360}$)



Ideals for irreducible components² of X_{par}

$$I_1^u = \langle u^{28} - u^{27} + \cdots + 4u - 1 \rangle$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 28 representations.

¹The image of knot diagram is generated by the software “**Draw programme**” developed by Andrew Bartholomew(<http://www.layer8.co.uk/math/draw/index.htm#Running-draw>), where we modified some parts for our purpose(<https://github.com/CATsTAILs/LinksPainter>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

$$\text{I. } I_1^u = \langle u^{28} - u^{27} + \cdots + 4u - 1 \rangle$$

(i) Arc colorings

$$\begin{aligned} a_5 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_6 &= \begin{pmatrix} 1 \\ u^2 \end{pmatrix} \\ a_1 &= \begin{pmatrix} -u \\ u \end{pmatrix} \\ a_4 &= \begin{pmatrix} u^2 + 1 \\ -u^2 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} u \\ u^3 + u \end{pmatrix} \\ a_7 &= \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix} \\ a_3 &= \begin{pmatrix} -u^8 - 5u^6 - 7u^4 - 2u^2 + 1 \\ -u^{10} - 6u^8 - 11u^6 - 6u^4 - u^2 \end{pmatrix} \\ a_9 &= \begin{pmatrix} u^7 + 4u^5 + 4u^3 + 2u \\ -u^7 - 3u^5 + u \end{pmatrix} \\ a_2 &= \begin{pmatrix} -u^{13} - 8u^{11} - 23u^9 - 30u^7 - 20u^5 - 6u^3 - u \\ u^{13} + 7u^{11} + 15u^9 + 8u^7 - 4u^5 - 3u^3 + u \end{pmatrix} \\ a_8 &= \begin{pmatrix} -u^{25} - 16u^{23} + \cdots + 2u^3 + 3u \\ -u^{27} - 17u^{25} + \cdots - u^3 + u \end{pmatrix} \\ a_8 &= \begin{pmatrix} -u^{25} - 16u^{23} + \cdots + 2u^3 + 3u \\ -u^{27} - 17u^{25} + \cdots - u^3 + u \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes

$$\begin{aligned} &= -4u^{27} + 4u^{26} - 76u^{25} + 72u^{24} - 628u^{23} + 556u^{22} - 2956u^{21} + 2404u^{20} - 8720u^{19} + \\ &6372u^{18} - 16704u^{17} + 10652u^{16} - 20788u^{15} + 11088u^{14} - 16232u^{13} + 6688u^{12} - 7212u^{11} + \\ &1772u^{10} - 1372u^9 - 168u^8 - 32u^7 - 140u^6 - 68u^5 + 8u^4 - 20u^3 - 16u^2 + 16u - 22 \end{aligned}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3	$u^{28} + 3u^{27} + \cdots + 29u + 8$
c_2, c_7, c_8	$u^{28} - u^{27} + \cdots - 2u - 1$
c_4, c_5, c_6 c_{10}, c_{11}	$u^{28} + u^{27} + \cdots - 4u - 1$
c_9	$u^{28} + u^{27} + \cdots - 100u - 61$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3	$y^{28} + 21y^{27} + \cdots - 793y + 64$
c_2, c_7, c_8	$y^{28} - 23y^{27} + \cdots - 10y + 1$
c_4, c_5, c_6 c_{10}, c_{11}	$y^{28} + 37y^{27} + \cdots - 10y + 1$
c_9	$y^{28} + 13y^{27} + \cdots - 3534y + 3721$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.304139 + 1.027830I$	$2.34823 - 8.20316I$	$-7.50942 + 6.87147I$
$u = 0.304139 - 1.027830I$	$2.34823 + 8.20316I$	$-7.50942 - 6.87147I$
$u = -0.265481 + 1.044260I$	$6.76083 + 4.04685I$	$-2.74550 - 4.44082I$
$u = -0.265481 - 1.044260I$	$6.76083 - 4.04685I$	$-2.74550 + 4.44082I$
$u = 0.208386 + 1.064510I$	$3.42392 + 0.10107I$	$-5.90157 + 0.38033I$
$u = 0.208386 - 1.064510I$	$3.42392 - 0.10107I$	$-5.90157 - 0.38033I$
$u = 0.100569 + 0.877295I$	$2.08521 - 1.33119I$	$-6.23078 + 5.40479I$
$u = 0.100569 - 0.877295I$	$2.08521 + 1.33119I$	$-6.23078 - 5.40479I$
$u = -0.265641 + 0.799341I$	$-3.12024 + 2.65179I$	$-11.98850 - 4.74580I$
$u = -0.265641 - 0.799341I$	$-3.12024 - 2.65179I$	$-11.98850 + 4.74580I$
$u = 0.526451 + 0.252550I$	$-1.61862 - 5.37366I$	$-12.50162 + 6.60941I$
$u = 0.526451 - 0.252550I$	$-1.61862 + 5.37366I$	$-12.50162 - 6.60941I$
$u = 0.430028 + 0.394667I$	$-1.11578 + 2.20453I$	$-10.78929 + 0.67162I$
$u = 0.430028 - 0.394667I$	$-1.11578 - 2.20453I$	$-10.78929 - 0.67162I$
$u = -0.473056 + 0.300840I$	$2.59067 + 1.52781I$	$-7.09485 - 4.38679I$
$u = -0.473056 - 0.300840I$	$2.59067 - 1.52781I$	$-7.09485 + 4.38679I$
$u = -0.499593$	-5.51225	-18.3880
$u = -0.04326 + 1.66904I$	$5.56370 + 3.66754I$	$-10.51538 + 0.I$
$u = -0.04326 - 1.66904I$	$5.56370 - 3.66754I$	$-10.51538 + 0.I$
$u = 0.01768 + 1.69715I$	$11.29630 - 1.73601I$	$-5.59144 + 0.I$
$u = 0.01768 - 1.69715I$	$11.29630 + 1.73601I$	$-5.59144 + 0.I$
$u = 0.290753$	-0.512208	-19.3960
$u = 0.07952 + 1.72739I$	$12.1446 - 9.7685I$	0
$u = 0.07952 - 1.72739I$	$12.1446 + 9.7685I$	0
$u = -0.06882 + 1.73175I$	$16.6638 + 5.4189I$	0
$u = -0.06882 - 1.73175I$	$16.6638 - 5.4189I$	0
$u = 0.05390 + 1.73452I$	$13.43200 - 0.98282I$	0
$u = 0.05390 - 1.73452I$	$13.43200 + 0.98282I$	0

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_3	$u^{28} + 3u^{27} + \cdots + 29u + 8$
c_2, c_7, c_8	$u^{28} - u^{27} + \cdots - 2u - 1$
c_4, c_5, c_6 c_{10}, c_{11}	$u^{28} + u^{27} + \cdots - 4u - 1$
c_9	$u^{28} + u^{27} + \cdots - 100u - 61$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_3	$y^{28} + 21y^{27} + \cdots - 793y + 64$
c_2, c_7, c_8	$y^{28} - 23y^{27} + \cdots - 10y + 1$
c_4, c_5, c_6 c_{10}, c_{11}	$y^{28} + 37y^{27} + \cdots - 10y + 1$
c_9	$y^{28} + 13y^{27} + \cdots - 3534y + 3721$