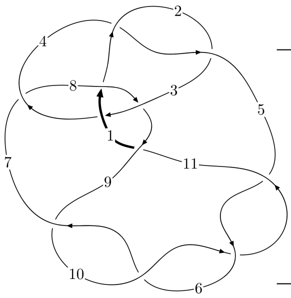
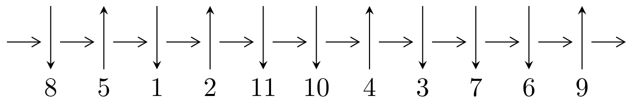
$11a_{265}$ ($K11a_{265}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -3051064229120u^{53} - 209833800856320u^{52} + \cdots + 578826226766096229b + 3885666844,$$
$$-3.04606\times 10^{12}u^{53} - 2.09713\times 10^{14}u^{52} + \cdots + 5.78826\times 10^{17}a + 1.06118\times 10^{18},\ u^{54} + u^{53} + \cdots + 3u +$$

* 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.

$\boldsymbol{I_1^u = \langle -3.05\times 10^{12}u^{53} - 2.10\times 10^{14}u^{52} + \cdots + 5.79\times 10^{17}b + 3.89\times 10^{9},\ -3.05\times 10^{12}u^{53} - 2.10\times 10^{14}u^{52} + \cdots + 5.79\times 10^{17}a + 1.06\times 10^{18},\ u^{54} + u^{53} + \cdots + 3u + 1\rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_6 = \begin{pmatrix}1\\-u^2\end{pmatrix}$$

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

$$a_3 = \begin{pmatrix}5.26248\times 10^{-6}u^{53} + 0.000362307u^{52} + \cdots - 2.47819u - 1.83333\\ 5.27112\times 10^{-6}u^{53} + 0.000362516u^{52} + \cdots + 3.16667u - 6.71301\times 10^{-9}\end{pmatrix}$$

$$a_5 = \begin{pmatrix}u^2+1\\-u^4-2u^2\end{pmatrix}$$

$$a_2 = \begin{pmatrix}1.21040\times 10^{-6}u^{53} + 0.0000804923u^{52} + \cdots - 3.23347u - 1.01667\\ 1.19100\times 10^{-6}u^{53} + 0.0000798962u^{52} + \cdots + 3.18333u - 1.72656\times 10^{-9}\end{pmatrix}$$

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

$$a_1 = \begin{pmatrix}u^5+2u^3-u\\u^5+3u^3+u\end{pmatrix}$$

$$a_4 = \begin{pmatrix}-7.89546\times 10^{-7}u^{53} - 0.0000401538u^{52} + \cdots - 2.31083u - 1.75000\\ -6.83885\times 10^{-7}u^{53} - 0.0000369648u^{52} + \cdots + 3.25000u + 1.91977\times 10^{-9}\end{pmatrix}$$

$$a_8 = \begin{pmatrix}-0.00581270u^{53} - 0.00326390u^{52} + \cdots - 0.253465u + 0.116715\\ 0.0000208391u^{53} + 0.00252101u^{52} + \cdots + 2.48502u + 0.00250009\end{pmatrix}$$

$$a_8 = \begin{pmatrix}-0.00581270u^{53} - 0.00326390u^{52} + \cdots - 0.253465u + 0.116715\\ 0.0000208391u^{53} + 0.00252101u^{52} + \cdots + 2.48502u + 0.00250009\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $=$
$-\frac{6135548622282394952}{192942075588698743}u^{53} - \frac{459136890023638500}{192942075588698743}u^{52} + \cdots + \frac{755304846551017564}{192942075588698743}u + \frac{883739019103167146}{192942075588698743}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{54}+3u^{53}+\cdots+u+1$
c_2, c_4	$u^{54}+u^{53}+\cdots+9u+1$
c_3	$u^{54}-9u^{53}+\cdots-u+1$
c_5, c_6, c_9 c_{10}	$u^{54}-u^{53}+\cdots-3u+1$
c_7	$u^{54}-3u^{53}+\cdots+15u-1$
c_8	$u^{54}-u^{53}+\cdots-39u+7$
c_{11}	$u^{54}+13u^{53}+\cdots+657u+99$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{54} + 9y^{53} + \cdots + 3y + 1$
c_2, c_4	$y^{54} - 35y^{53} + \cdots - 9y + 1$
c_3	$y^{54} - 3y^{53} + \cdots - 9y + 1$
c_5, c_6, c_9 c_{10}	$y^{54} + 61y^{53} + \cdots + 3y + 1$
c_7	$y^{54} - 55y^{53} + \cdots - 413y + 1$
c_8	$y^{54} - 43y^{53} + \cdots - 317y + 49$
c_{11}	$y^{54} + 5y^{53} + \cdots + 103347y + 9801$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.545362 + 0.766936I$ $a = -0.188047 - 0.903445I$ $b = -0.949767 - 0.409626I$	$1.00016 - 3.95703I$	$-3.00000 + 11.79776I$
$u = 0.545362 - 0.766936I$ $a = -0.188047 + 0.903445I$ $b = -0.949767 + 0.409626I$	$1.00016 + 3.95703I$	$-3.00000 - 11.79776I$
$u = -0.172970 + 1.046260I$ $a = -1.181840 + 0.461864I$ $b = -0.428067 - 0.337725I$	$5.26922 - 5.01222I$	0
$u = -0.172970 - 1.046260I$ $a = -1.181840 - 0.461864I$ $b = -0.428067 + 0.337725I$	$5.26922 + 5.01222I$	0
$u = -0.561965 + 0.693690I$ $a = 0.31746 + 1.44112I$ $b = -1.53183 + 1.30909I$	$2.46124 + 12.12320I$	$0.08589 - 9.41589I$
$u = -0.561965 - 0.693690I$ $a = 0.31746 - 1.44112I$ $b = -1.53183 - 1.30909I$	$2.46124 - 12.12320I$	$0.08589 + 9.41589I$
$u = -0.506554 + 0.624526I$ $a = 0.086447 - 0.728121I$ $b = 1.52442 - 0.61745I$	$-1.47018 + 6.23173I$	$-3.03340 - 8.93677I$
$u = -0.506554 - 0.624526I$ $a = 0.086447 + 0.728121I$ $b = 1.52442 + 0.61745I$	$-1.47018 - 6.23173I$	$-3.03340 + 8.93677I$
$u = 0.670771 + 0.429255I$ $a = 0.279527 - 0.397115I$ $b = -0.026389 - 0.348007I$	$-0.67521 - 2.21346I$	$-9.82154 + 8.24478I$
$u = 0.670771 - 0.429255I$ $a = 0.279527 + 0.397115I$ $b = -0.026389 + 0.348007I$	$-0.67521 + 2.21346I$	$-9.82154 - 8.24478I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.411382 + 0.638832I$ $a = 0.14437 - 1.44846I$ $b = 0.95232 - 1.40932I$	$3.27194 + 4.12688I$	$4.58912 - 9.06876I$
$u = -0.411382 - 0.638832I$ $a = 0.14437 + 1.44846I$ $b = 0.95232 + 1.40932I$	$3.27194 - 4.12688I$	$4.58912 + 9.06876I$
$u = 0.499596 + 0.521821I$ $a = -0.436226 - 0.083526I$ $b = 0.207048 + 0.493590I$	$-0.70487 - 1.75962I$	$-4.58587 + 3.17454I$
$u = 0.499596 - 0.521821I$ $a = -0.436226 + 0.083526I$ $b = 0.207048 - 0.493590I$	$-0.70487 + 1.75962I$	$-4.58587 - 3.17454I$
$u = -0.293339 + 0.635944I$ $a = 0.850317 - 1.011600I$ $b = -0.428431 - 0.192704I$	$4.01735 + 0.63222I$	$7.39930 - 2.66782I$
$u = -0.293339 - 0.635944I$ $a = 0.850317 + 1.011600I$ $b = -0.428431 + 0.192704I$	$4.01735 - 0.63222I$	$7.39930 + 2.66782I$
$u = -0.659334 + 0.232085I$ $a = 0.346734 - 1.144240I$ $b = 1.24395 + 0.77928I$	$1.09662 - 8.00461I$	$-2.60038 + 4.65248I$
$u = -0.659334 - 0.232085I$ $a = 0.346734 + 1.144240I$ $b = 1.24395 - 0.77928I$	$1.09662 + 8.00461I$	$-2.60038 - 4.65248I$
$u = 0.393123 + 0.559225I$ $a = 0.37563 + 4.16236I$ $b = 2.99641 + 0.60734I$	$1.56763 - 1.75278I$	$-6.2825 - 17.5292I$
$u = 0.393123 - 0.559225I$ $a = 0.37563 - 4.16236I$ $b = 2.99641 - 0.60734I$	$1.56763 + 1.75278I$	$-6.2825 + 17.5292I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.148291 + 1.360240I$ $a = -0.709327 + 0.835990I$ $b = -0.329247 + 0.393163I$	$4.94656 - 5.25128I$	0
$u = 0.148291 - 1.360240I$ $a = -0.709327 - 0.835990I$ $b = -0.329247 - 0.393163I$	$4.94656 + 5.25128I$	0
$u = -0.000111 + 0.622884I$ $a = -0.308967 - 0.550291I$ $b = -0.810890 + 0.336840I$	$1.31595 - 1.53064I$	$2.46645 + 4.42217I$
$u = -0.000111 - 0.622884I$ $a = -0.308967 + 0.550291I$ $b = -0.810890 - 0.336840I$	$1.31595 + 1.53064I$	$2.46645 - 4.42217I$
$u = -0.541870 + 0.294917I$ $a = -0.16659 + 1.62943I$ $b = -0.870080 - 0.000654I$	$-2.42907 - 2.60276I$	$-6.59954 + 2.27110I$
$u = -0.541870 - 0.294917I$ $a = -0.16659 - 1.62943I$ $b = -0.870080 + 0.000654I$	$-2.42907 + 2.60276I$	$-6.59954 - 2.27110I$
$u = 0.615568$ $a = -0.465542$ $b = 0.796207$	-1.10777	-11.9580
$u = -0.04794 + 1.44591I$ $a = 0.30412 - 1.67700I$ $b = 0.023300 - 0.933728I$	$2.95011 - 0.80061I$	0
$u = -0.04794 - 1.44591I$ $a = 0.30412 + 1.67700I$ $b = 0.023300 + 0.933728I$	$2.95011 + 0.80061I$	0
$u = 0.346728 + 0.415892I$ $a = -0.41230 - 2.49448I$ $b = -2.30227 + 0.40921I$	$1.12331 - 0.98698I$	$7.38443 + 9.46034I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.346728 - 0.415892I$ $a = -0.41230 + 2.49448I$ $b = -2.30227 - 0.40921I$	$1.12331 + 0.98698I$	$7.38443 - 9.46034I$
$u = 0.496604$ $a = -0.826100$ $b = 0.696774$	-1.13235	-10.5020
$u = 0.07837 + 1.54926I$ $a = 1.86936 + 1.70184I$ $b = 2.37253 + 0.73488I$	$7.92145 - 2.31500I$	0
$u = 0.07837 - 1.54926I$ $a = 1.86936 - 1.70184I$ $b = 2.37253 - 0.73488I$	$7.92145 + 2.31500I$	0
$u = 0.13720 + 1.55270I$ $a = 0.040303 - 0.953011I$ $b = -0.542375 - 0.985698I$	$6.29079 - 4.01270I$	0
$u = 0.13720 - 1.55270I$ $a = 0.040303 + 0.953011I$ $b = -0.542375 + 0.985698I$	$6.29079 + 4.01270I$	0
$u = -0.04879 + 1.56688I$ $a = 1.45840 - 1.17346I$ $b = 1.72999 - 1.25663I$	$8.64965 - 1.05444I$	0
$u = -0.04879 - 1.56688I$ $a = 1.45840 + 1.17346I$ $b = 1.72999 + 1.25663I$	$8.64965 + 1.05444I$	0
$u = 0.10731 + 1.56661I$ $a = -2.89723 - 2.74617I$ $b = -2.89407 - 0.64960I$	$8.80102 - 3.53795I$	0
$u = 0.10731 - 1.56661I$ $a = -2.89723 + 2.74617I$ $b = -2.89407 + 0.64960I$	$8.80102 + 3.53795I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.14576+1.57745I$ $a=-1.40684+1.66633I$ $b=-2.06161+1.25521I$	$5.94961+8.61448I$	0
$u=-0.14576-1.57745I$ $a=-1.40684-1.66633I$ $b=-2.06161-1.25521I$	$5.94961-8.61448I$	0
$u=-0.08890+1.58461I$ $a=\ 0.610813+0.478237I$ $b=\ 1.332270+0.248255I$	$11.59780+2.07370I$	0
$u=-0.08890-1.58461I$ $a=\ 0.610813-0.478237I$ $b=\ 1.332270-0.248255I$	$11.59780-2.07370I$	0
$u=-0.11679+1.58495I$ $a=-0.47013+2.67136I$ $b=-0.82660+2.34169I$	$10.82650+6.06392I$	0
$u=-0.11679-1.58495I$ $a=-0.47013-2.67136I$ $b=-0.82660-2.34169I$	$10.82650-6.06392I$	0
$u=-0.372639+0.159058I$ $a=-1.55778+0.98703I$ $b=-0.893238-0.244729I$	$2.00449-1.26243I$	$-0.21146+2.28876I$
$u=-0.372639-0.159058I$ $a=-1.55778-0.98703I$ $b=-0.893238+0.244729I$	$2.00449+1.26243I$	$-0.21146-2.28876I$
$u=-0.16943+1.60101I$ $a=\ 0.78343-2.47982I$ $b=\ 1.68631-1.83629I$	$10.1949+14.8555I$	0
$u=-0.16943-1.60101I$ $a=\ 0.78343+2.47982I$ $b=\ 1.68631+1.83629I$	$10.1949-14.8555I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.16913 + 1.62019I$ $a = 0.64236 + 1.39992I$ $b = 1.033010 + 0.913072I$	$9.06286 - 6.69333I$	0
$u = 0.16913 - 1.62019I$ $a = 0.64236 - 1.39992I$ $b = 1.033010 - 0.913072I$	$9.06286 + 6.69333I$	0
$u = -0.01419 + 1.65792I$ $a = 0.271821 + 0.270288I$ $b = -0.453188 + 0.515678I$	$14.5155 - 4.5567I$	0
$u = -0.01419 - 1.65792I$ $a = 0.271821 - 0.270288I$ $b = -0.453188 - 0.515678I$	$14.5155 + 4.5567I$	0

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^{54} + 3u^{53} + \cdots + u + 1$
c_2, c_4	$u^{54} + u^{53} + \cdots + 9u + 1$
c_3	$u^{54} - 9u^{53} + \cdots - u + 1$
c_5, c_6, c_9 c_{10}	$u^{54} - u^{53} + \cdots - 3u + 1$
c_7	$u^{54} - 3u^{53} + \cdots + 15u - 1$
c_8	$u^{54} - u^{53} + \cdots - 39u + 7$
c_{11}	$u^{54} + 13u^{53} + \cdots + 657u + 99$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^{54} + 9y^{53} + \cdots + 3y + 1$
c_2, c_4	$y^{54} - 35y^{53} + \cdots - 9y + 1$
c_3	$y^{54} - 3y^{53} + \cdots - 9y + 1$
c_5, c_6, c_9 c_{10}	$y^{54} + 61y^{53} + \cdots + 3y + 1$
c_7	$y^{54} - 55y^{53} + \cdots - 413y + 1$
c_8	$y^{54} - 43y^{53} + \cdots - 317y + 49$
c_{11}	$y^{54} + 5y^{53} + \cdots + 103347y + 9801$