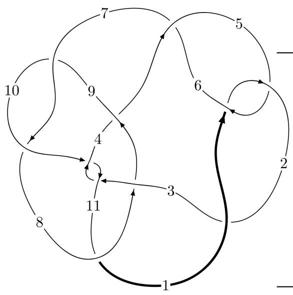
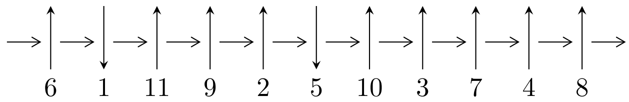
$11a_{150}$ ($K11a_{150}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 5.92448 \times 10^{33} u^{61} - 1.02898 \times 10^{34} u^{60} + \cdots + 1.17126 \times 10^{34} b - 5.31916 \times 10^{33},$$
$$8.54907 \times 10^{32} u^{61} + 2.67122 \times 10^{33} u^{60} + \cdots + 1.17126 \times 10^{34} a - 1.99667 \times 10^{34},\ u^{62} - 3u^{61} + \cdots - 3u + 1$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 62 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.

$$\boldsymbol{I_1^u = \langle 5.92\times10^{33}u^{61} - 1.03\times10^{34}u^{60} + \cdots + 1.17\times10^{34}b - 5.32\times10^{33},\ 8.55\times10^{32}u^{61} + 2.67\times10^{33}u^{60} + \cdots + 1.17\times10^{34}a - 2.00\times10^{34},\ u^{62} - 3u^{61} + \cdots - 3u + 1\rangle}$$

(i) Arc colorings

$$a_2 = \begin{pmatrix}1\\0\end{pmatrix}$$

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

$$a_1 = \begin{pmatrix}1\\u^2\end{pmatrix}$$

$$a_3 = \begin{pmatrix}u^2+1\\u^4\end{pmatrix}$$

$$a_5 = \begin{pmatrix}-u\\u\end{pmatrix}$$

$$a_7 = \begin{pmatrix}-u^3\\u^3+u\end{pmatrix}$$

$$a_9 = \begin{pmatrix}-0.0729904u^{61} - 0.228063u^{60} + \cdots - 3.85257u + 1.70472\\-0.505821u^{61} + 0.878522u^{60} + \cdots + 0.946087u + 0.454140\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}0.0556025u^{61} - 0.656967u^{60} + \cdots - 3.50832u + 1.53444\\-0.800994u^{61} + 1.63689u^{60} + \cdots - 0.390734u + 0.638367\end{pmatrix}$$

$$a_4 = \begin{pmatrix}0.955009u^{61} - 3.66751u^{60} + \cdots + 4.99704u - 2.34895\\-0.104931u^{61} + 0.897107u^{60} + \cdots + 0.756639u - 0.648091\end{pmatrix}$$

$$a_8 = \begin{pmatrix}-0.101533u^{61} - 0.116613u^{60} + \cdots - 5.40842u + 1.67042\\-0.557807u^{61} + 1.02766u^{60} + \cdots + 0.790291u + 0.499051\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-0.212577u^{61} + 0.857984u^{60} + \cdots - 5.64360u + 3.30260\\-1.52544u^{61} + 4.42060u^{60} + \cdots + 2.47746u - 0.957556\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}-0.212577u^{61} + 0.857984u^{60} + \cdots - 5.64360u + 3.30260\\-1.52544u^{61} + 4.42060u^{60} + \cdots + 2.47746u - 0.957556\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2.26821u^{61} + 7.95048u^{60} + \cdots - 1.19620u + 11.3832$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{62} - 3u^{61} + \cdots - 3u + 1$
c_2, c_6	$u^{62} + 17u^{61} + \cdots - u + 1$
c_3, c_{10}	$u^{62} + 3u^{61} + \cdots - u + 1$
c_4	$u^{62} + 15u^{61} + \cdots + 14601u - 4393$
c_7, c_9	$u^{62} + u^{61} + \cdots + 3u - 1$
c_8	$u^{62} + u^{61} + \cdots - 11u - 1$
c_{11}	$u^{62} + 27u^{61} + \cdots - 73u - 43$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{62} + 17y^{61} + \cdots - y + 1$
c_2, c_6	$y^{62} + 57y^{61} + \cdots - 49y + 1$
c_3, c_{10}	$y^{62} + 37y^{61} + \cdots - y + 1$
c_4	$y^{62} + 345y^{61} + \cdots - 184476553y + 19298449$
c_7, c_9	$y^{62} - 43y^{61} + \cdots + 67y + 1$
c_8	$y^{62} - 3y^{61} + \cdots + 27y + 1$
c_{11}	$y^{62} - 343y^{61} + \cdots - 98037y + 1849$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.233941 + 0.974873I$ $a = -0.130745 + 1.231300I$ $b = 1.20344 - 0.93140I$	$-5.58386 - 5.07710I$	$0. + 6.39246I$
$u = -0.233941 - 0.974873I$ $a = -0.130745 - 1.231300I$ $b = 1.20344 + 0.93140I$	$-5.58386 + 5.07710I$	$0. - 6.39246I$
$u = -0.342652 + 0.944226I$ $a = -0.419993 - 0.060562I$ $b = -0.625287 + 0.596594I$	$-5.00545 - 0.49255I$	$0. + 3.20018I$
$u = -0.342652 - 0.944226I$ $a = -0.419993 + 0.060562I$ $b = -0.625287 - 0.596594I$	$-5.00545 + 0.49255I$	$0. - 3.20018I$
$u = 0.153290 + 0.920392I$ $a = 0.174303 + 0.695564I$ $b = -0.725323 - 0.206126I$	$-1.76466 + 1.66966I$	$2.52149 - 4.58368I$
$u = 0.153290 - 0.920392I$ $a = 0.174303 - 0.695564I$ $b = -0.725323 + 0.206126I$	$-1.76466 - 1.66966I$	$2.52149 + 4.58368I$
$u = 0.929527$ $a = -0.431713$ $b = -0.530504$	4.73356	21.5180
$u = 0.736100 + 0.839352I$ $a = 0.625972 - 1.122520I$ $b = 0.25553 + 1.54232I$	$1.37977 + 2.70121I$	0
$u = 0.736100 - 0.839352I$ $a = 0.625972 + 1.122520I$ $b = 0.25553 - 1.54232I$	$1.37977 - 2.70121I$	0
$u = -0.789702 + 0.810743I$ $a = 1.12489 - 1.57251I$ $b = -1.73762 + 0.87825I$	$4.18121 - 0.02705I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.789702 - 0.810743I$ $a = 1.12489 + 1.57251I$ $b = -1.73762 - 0.87825I$	$4.18121 + 0.02705I$	0
$u = 0.817053 + 0.788358I$ $a = -1.72604 - 1.05558I$ $b = 1.91057 + 0.30098I$	$1.14770 - 3.66515I$	0
$u = 0.817053 - 0.788358I$ $a = -1.72604 + 1.05558I$ $b = 1.91057 - 0.30098I$	$1.14770 + 3.66515I$	0
$u = -0.330897 + 1.086980I$ $a = 0.052301 - 0.533925I$ $b = -1.136400 - 0.072139I$	$-2.42165 - 10.69330I$	0
$u = -0.330897 - 1.086980I$ $a = 0.052301 + 0.533925I$ $b = -1.136400 + 0.072139I$	$-2.42165 + 10.69330I$	0
$u = -0.191245 + 1.125970I$ $a = 0.424086 + 0.452072I$ $b = -0.112808 - 0.950910I$	$-3.25243 + 3.43205I$	0
$u = -0.191245 - 1.125970I$ $a = 0.424086 - 0.452072I$ $b = -0.112808 + 0.950910I$	$-3.25243 - 3.43205I$	0
$u = 0.699940 + 0.915282I$ $a = 0.883343 + 0.109262I$ $b = -0.665362 + 0.493910I$	$1.15333 + 2.78689I$	0
$u = 0.699940 - 0.915282I$ $a = 0.883343 - 0.109262I$ $b = -0.665362 - 0.493910I$	$1.15333 - 2.78689I$	0
$u = 0.293896 + 0.791599I$ $a = 1.372560 - 0.140152I$ $b = -1.74453 + 0.97363I$	$-0.39022 + 3.86672I$	$5.90788 - 9.08899I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.293896 - 0.791599I$ $a = 1.372560 + 0.140152I$ $b = -1.74453 - 0.97363I$	$-0.39022 - 3.86672I$	$5.90788 + 9.08899I$
$u = -0.751244 + 0.881873I$ $a = 7.9454 + 16.0972I$ $b = 5.3873 - 20.3768I$	$3.03672 - 2.84894I$	$-90.977 - 147.127I$
$u = -0.751244 - 0.881873I$ $a = 7.9454 - 16.0972I$ $b = 5.3873 + 20.3768I$	$3.03672 + 2.84894I$	$-90.977 + 147.127I$
$u = 0.099206 + 0.819273I$ $a = -0.693059 + 0.958627I$ $b = -0.97879 + 1.67339I$	$-1.49291 - 0.30288I$	$6.68102 - 7.18270I$
$u = 0.099206 - 0.819273I$ $a = -0.693059 - 0.958627I$ $b = -0.97879 - 1.67339I$	$-1.49291 + 0.30288I$	$6.68102 + 7.18270I$
$u = -0.811325 + 0.855337I$ $a = 1.02748 - 1.98302I$ $b = -1.43041 + 0.97746I$	$5.99939 + 0.78225I$	0
$u = -0.811325 - 0.855337I$ $a = 1.02748 + 1.98302I$ $b = -1.43041 - 0.97746I$	$5.99939 - 0.78225I$	0
$u = -0.817162 + 0.076718I$ $a = 0.557951 + 0.249895I$ $b = 0.619554 + 0.545965I$	$0.96723 + 6.76946I$	$10.42875 - 6.10913I$
$u = -0.817162 - 0.076718I$ $a = 0.557951 - 0.249895I$ $b = 0.619554 - 0.545965I$	$0.96723 - 6.76946I$	$10.42875 + 6.10913I$
$u = 0.903335 + 0.763131I$ $a = 1.58371 + 1.40581I$ $b = -2.04345 + 0.10821I$	$5.82273 - 9.92532I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.903335 - 0.763131I$ $a = 1.58371 - 1.40581I$ $b = -2.04345 - 0.10821I$	$5.82273 + 9.92532I$	0
$u = 0.801297 + 0.878767I$ $a = -0.483885 - 0.937624I$ $b = 0.274288 + 0.065829I$	$6.91724 + 2.74492I$	0
$u = 0.801297 - 0.878767I$ $a = -0.483885 + 0.937624I$ $b = 0.274288 - 0.065829I$	$6.91724 - 2.74492I$	0
$u = -0.919899 + 0.762554I$ $a = -1.09122 + 1.22881I$ $b = 1.52740 - 0.02797I$	$9.64228 + 3.86851I$	0
$u = -0.919899 - 0.762554I$ $a = -1.09122 - 1.22881I$ $b = 1.52740 + 0.02797I$	$9.64228 - 3.86851I$	0
$u = 0.384411 + 1.134740I$ $a = -0.110043 - 0.199538I$ $b = 0.727530 - 0.187535I$	$0.94109 + 4.46712I$	0
$u = 0.384411 - 1.134740I$ $a = -0.110043 + 0.199538I$ $b = 0.727530 + 0.187535I$	$0.94109 - 4.46712I$	0
$u = 0.794631 + 0.900072I$ $a = 0.529387 + 0.334235I$ $b = -1.36232 - 0.59261I$	$6.85084 + 3.23980I$	0
$u = 0.794631 - 0.900072I$ $a = 0.529387 - 0.334235I$ $b = -1.36232 + 0.59261I$	$6.85084 - 3.23980I$	0
$u = -0.758229 + 0.946770I$ $a = -1.32947 + 1.46124I$ $b = 2.03631 - 0.87059I$	$3.76313 - 5.80968I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.758229 - 0.946770I$ $a = -1.32947 - 1.46124I$ $b = 2.03631 + 0.87059I$	$3.76313 + 5.80968I$	0
$u = -0.792260 + 0.922878I$ $a = -1.64621 + 1.05149I$ $b = 2.57092 - 0.66498I$	$5.79100 - 6.78973I$	0
$u = -0.792260 - 0.922878I$ $a = -1.64621 - 1.05149I$ $b = 2.57092 + 0.66498I$	$5.79100 + 6.78973I$	0
$u = 0.989705 + 0.719878I$ $a = 0.244303 + 0.652654I$ $b = -0.528313 - 0.037104I$	$4.58484 + 2.57158I$	0
$u = 0.989705 - 0.719878I$ $a = 0.244303 - 0.652654I$ $b = -0.528313 + 0.037104I$	$4.58484 - 2.57158I$	0
$u = 0.767748 + 0.968583I$ $a = 0.93996 + 1.97333I$ $b = -1.74350 - 1.71204I$	$0.59571 + 9.61001I$	0
$u = 0.767748 - 0.968583I$ $a = 0.93996 - 1.97333I$ $b = -1.74350 + 1.71204I$	$0.59571 - 9.61001I$	0
$u = 0.796750 + 1.019410I$ $a = -1.09739 - 1.94527I$ $b = 2.54984 + 1.54483I$	$5.0175 + 16.2111I$	0
$u = 0.796750 - 1.019410I$ $a = -1.09739 + 1.94527I$ $b = 2.54984 - 1.54483I$	$5.0175 - 16.2111I$	0
$u = -0.208653 + 0.671289I$ $a = -0.50660 - 1.40640I$ $b = 0.966809 + 0.993102I$	$1.24146 - 0.98622I$	$9.68923 - 0.00108I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.208653 - 0.671289I$ $a = -0.50660 + 1.40640I$ $b = 0.966809 - 0.993102I$	$1.24146 + 0.98622I$	$9.68923 + 0.00108I$
$u = -0.804538 + 1.026660I$ $a = 0.95806 - 1.42226I$ $b = -2.12242 + 1.08518I$	$8.80960 - 10.22650I$	0
$u = -0.804538 - 1.026660I$ $a = 0.95806 + 1.42226I$ $b = -2.12242 - 1.08518I$	$8.80960 + 10.22650I$	0
$u = 0.852377 + 1.058720I$ $a = -0.240483 - 0.650672I$ $b = 0.924864 + 0.679823I$	$3.54226 + 4.13545I$	0
$u = 0.852377 - 1.058720I$ $a = -0.240483 + 0.650672I$ $b = 0.924864 - 0.679823I$	$3.54226 - 4.13545I$	0
$u = -0.267685 + 0.530806I$ $a = -1.06202 - 2.33490I$ $b = 0.263606 + 1.305770I$	$1.46923 - 1.18627I$	$9.25634 + 4.59290I$
$u = -0.267685 - 0.530806I$ $a = -1.06202 + 2.33490I$ $b = 0.263606 - 1.305770I$	$1.46923 + 1.18627I$	$9.25634 - 4.59290I$
$u = -0.535919 + 0.048687I$ $a = 0.045166 + 0.921741I$ $b = -0.559745 + 0.668972I$	$-2.56130 - 2.50988I$	$6.34359 + 3.13989I$
$u = -0.535919 - 0.048687I$ $a = 0.045166 - 0.921741I$ $b = -0.559745 - 0.668972I$	$-2.56130 + 2.50988I$	$6.34359 - 3.13989I$
$u = 0.335461 + 0.238621I$ $a = 1.34053 - 2.57954I$ $b = 0.814929 + 0.614489I$	$1.04914 - 1.31929I$	$11.02923 + 0.35157I$

	Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u =$	$0.335461 - 0.238621I$		
$a =$	$1.34053 + 2.57954I$	$1.04914 + 1.31929I$	$11.02923 - 0.35157I$
$b =$	$0.814929 - 0.614489I$		
$u =$	0.330774		
$a =$	0.847207	0.709445	14.3000
$b =$	0.497316		

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{62} - 3u^{61} + \cdots - 3u + 1$
c_2, c_6	$u^{62} + 17u^{61} + \cdots - u + 1$
c_3, c_{10}	$u^{62} + 3u^{61} + \cdots - u + 1$
c_4	$u^{62} + 15u^{61} + \cdots + 14601u - 4393$
c_7, c_9	$u^{62} + u^{61} + \cdots + 3u - 1$
c_8	$u^{62} + u^{61} + \cdots - 11u - 1$
c_{11}	$u^{62} + 27u^{61} + \cdots - 73u - 43$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{62} + 17y^{61} + \cdots - y + 1$
c_2, c_6	$y^{62} + 57y^{61} + \cdots - 49y + 1$
c_3, c_{10}	$y^{62} + 37y^{61} + \cdots - y + 1$
c_4	$y^{62} + 345y^{61} + \cdots - 184476553y + 19298449$
c_7, c_9	$y^{62} - 43y^{61} + \cdots + 67y + 1$
c_8	$y^{62} - 3y^{61} + \cdots + 27y + 1$
c_{11}	$y^{62} - 343y^{61} + \cdots - 98037y + 1849$