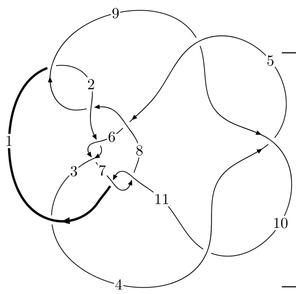
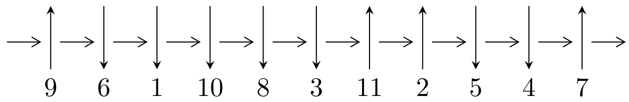
$11a_{347}$ $(K11a_{347})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle 256000670808631u^{21} + 674760339816179u^{20} + \cdots + 232517605023576b + 5745913318570412,$$
$$3.63354 \times 10^{15}u^{21} + 9.67535 \times 10^{15}u^{20} + \cdots + 1.86014 \times 10^{15}a + 8.31691 \times 10^{16},\ u^{22} + 3u^{21} + \cdots + 56u +$$
$$I_2^u = \langle 2u^{17}a + 2u^{17} + \cdots + a + 6,\ -10u^{17}a + 23u^{17} + \cdots - 19a + 63,\ u^{18} - u^{17} + \cdots + 3u - 1\rangle$$
$$I_3^u = \langle b - 1,\ 4a - u + 2,\ u^2 + 2\rangle$$

$$I_1^v = \langle a,\ b + 1,\ 2v - 1\rangle$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 61 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. $\boldsymbol{I_1^u =}$
$\boldsymbol{\langle 2.56\times10^{14}u^{21}+6.75\times10^{14}u^{20}+\cdots+2.33\times10^{14}b+5.75\times10^{15},\ 3.63\times10^{15}u^{21}+ 9.68\times10^{15}u^{20}+\cdots+1.86\times10^{15}a+8.32\times10^{16},\ u^{22}+3u^{21}+\cdots+56u+8\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix}0\\u\end{pmatrix}$$

$$a_9 = \begin{pmatrix}1\\0\end{pmatrix}$$

$$a_2 = \begin{pmatrix}-1.95337u^{21}-5.20141u^{20}+\cdots-184.686u-44.7112\\-1.10099u^{21}-2.90198u^{20}+\cdots-104.609u-24.7117\end{pmatrix}$$

$$a_{10} = \begin{pmatrix}1\\u^2\end{pmatrix}$$

$$a_1 = \begin{pmatrix}-0.852375u^{21}-2.29943u^{20}+\cdots-80.0775u-19.9995\\-1.10099u^{21}-2.90198u^{20}+\cdots-104.609u-24.7117\end{pmatrix}$$

$$a_4 = \begin{pmatrix}u\\u^3+u\end{pmatrix}$$

$$a_{11} = \begin{pmatrix}u^2+1\\u^4+2u^2\end{pmatrix}$$

$$a_3 = \begin{pmatrix}-0.410016u^{21}-1.10389u^{20}+\cdots-37.5475u-9.64240\\-0.733210u^{21}-1.92174u^{20}+\cdots-68.1510u-16.3230\end{pmatrix}$$

$$a_8 = \begin{pmatrix}-0.193796u^{21}-0.498389u^{20}+\cdots-16.9193u-2.65074\\-1.07925u^{21}-2.88821u^{20}+\cdots-100.094u-23.3142\end{pmatrix}$$

$$a_6 = \begin{pmatrix}-0.293649u^{21}-0.752180u^{20}+\cdots-26.8185u-5.67130\\-0.746302u^{21}-1.99347u^{20}+\cdots-69.2277u-16.3438\end{pmatrix}$$

$$a_7 = \begin{pmatrix}1.06840u^{21}+2.85509u^{20}+\cdots+101.338u+25.2691\\-0.787989u^{21}-2.09142u^{20}+\cdots-72.2901u-16.6414\end{pmatrix}$$

$$a_7 = \begin{pmatrix}1.06840u^{21}+2.85509u^{20}+\cdots+101.338u+25.2691\\-0.787989u^{21}-2.09142u^{20}+\cdots-72.2901u-16.6414\end{pmatrix}$$

(ii) Obstruction class $=-1$

(iii) Cusp Shapes
$= \frac{1537891371251021}{310023473364768}u^{21}+\frac{3975035432412625}{310023473364768}u^{20}+\cdots+\frac{461879710488329}{1099374019024}u+\frac{7058304318144475}{775058868341192}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7, c_8 c_{11}	$u^{22} + u^{21} + \cdots - 7u - 3$
c_2, c_6	$u^{22} - 9u^{20} + \cdots + 7u - 24$
c_3, c_5	$8(8u^{22} - 20u^{21} + \cdots - 2u^2 + 1)$
c_4, c_9, c_{10}	$u^{22} + 3u^{21} + \cdots + 56u + 8$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7, c_8 c_{11}	$y^{22} + 9y^{21} + \cdots - 55y + 9$
c_2, c_6	$y^{22} - 18y^{21} + \cdots + 335y + 576$
c_3, c_5	$64(64y^{22} - 240y^{21} + \cdots - 4y + 1)$
c_4, c_9, c_{10}	$y^{22} + 21y^{21} + \cdots - 480y + 64$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.923083 + 0.449241I$ $a = 0.46489 - 1.80679I$ $b = -0.471805 - 1.329800I$	$-9.5532 + 10.8949I$	$-8.89518 - 7.36414I$
$u = -0.923083 - 0.449241I$ $a = 0.46489 + 1.80679I$ $b = -0.471805 + 1.329800I$	$-9.5532 - 10.8949I$	$-8.89518 + 7.36414I$
$u = 1.051430 + 0.225174I$ $a = 0.06569 + 1.67599I$ $b = -0.304231 + 1.040140I$	$-3.20816 - 4.89414I$	$-6.47528 + 9.10540I$
$u = 1.051430 - 0.225174I$ $a = 0.06569 - 1.67599I$ $b = -0.304231 - 1.040140I$	$-3.20816 + 4.89414I$	$-6.47528 - 9.10540I$
$u = -0.879824 + 0.816752I$ $a = 0.559661 - 1.087650I$ $b = 0.313637 - 1.227100I$	$-8.56742 - 4.93041I$	$-9.24363 + 4.50732I$
$u = -0.879824 - 0.816752I$ $a = 0.559661 + 1.087650I$ $b = 0.313637 + 1.227100I$	$-8.56742 + 4.93041I$	$-9.24363 - 4.50732I$
$u = -0.123835 + 1.345220I$ $a = 0.527565 - 0.232201I$ $b = -1.43217 + 0.42237I$	$4.03174 + 1.74144I$	$-4.49330 - 4.13639I$
$u = -0.123835 - 1.345220I$ $a = 0.527565 + 0.232201I$ $b = -1.43217 - 0.42237I$	$4.03174 - 1.74144I$	$-4.49330 + 4.13639I$
$u = -0.613996 + 1.252680I$ $a = -0.426413 + 1.140360I$ $b = 0.267923 + 0.935360I$	$0.17781 + 3.00927I$	$-2.42568 - 8.45199I$
$u = -0.613996 - 1.252680I$ $a = -0.426413 - 1.140360I$ $b = 0.267923 - 0.935360I$	$0.17781 - 3.00927I$	$-2.42568 + 8.45199I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.051311 + 0.543007I$ $a = 0.085673 + 0.510275I$ $b = 0.531392 + 0.374501I$	$0.81916 + 1.15831I$	$3.24306 - 4.91464I$
$u = 0.051311 - 0.543007I$ $a = 0.085673 - 0.510275I$ $b = 0.531392 - 0.374501I$	$0.81916 - 1.15831I$	$3.24306 + 4.91464I$
$u = 0.07053 + 1.46071I$ $a = 0.392040 + 0.012145I$ $b = -0.893893 - 0.461606I$	$7.21746 + 0.43098I$	$4.81736 - 2.08890I$
$u = 0.07053 - 1.46071I$ $a = 0.392040 - 0.012145I$ $b = -0.893893 + 0.461606I$	$7.21746 - 0.43098I$	$4.81736 + 2.08890I$
$u = 0.38554 + 1.45702I$ $a = -0.858101 - 1.123100I$ $b = 0.519928 - 1.174350I$	$2.25077 - 9.90431I$	$-2.68871 + 7.61704I$
$u = 0.38554 - 1.45702I$ $a = -0.858101 + 1.123100I$ $b = 0.519928 + 1.174350I$	$2.25077 + 9.90431I$	$-2.68871 - 7.61704I$
$u = -0.34668 + 1.51369I$ $a = -1.07441 + 0.97292I$ $b = 0.60863 + 1.34961I$	$-3.2485 + 15.4927I$	$-5.17708 - 7.97844I$
$u = -0.34668 - 1.51369I$ $a = -1.07441 - 0.97292I$ $b = 0.60863 - 1.34961I$	$-3.2485 - 15.4927I$	$-5.17708 + 7.97844I$
$u = -0.364239$ $a = 0.703521$ $b = 1.25729$	-0.360724	-18.5120
$u = -0.342457$ $a = -1.98069$ $b = -0.295995$	-1.11076	-11.5720

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.18195 + 1.70803I$ $a = 0.276992 + 0.588080I$ $b = -0.120052 + 0.802501I$	$1.76897 - 0.99297I$	$2.13017 + 4.98419I$
$u = 0.18195 - 1.70803I$ $a = 0.276992 - 0.588080I$ $b = -0.120052 - 0.802501I$	$1.76897 + 0.99297I$	$2.13017 - 4.98419I$

II. $\boldsymbol{I_2^u = \langle 2u^{17}a + 2u^{17} + \cdots + a + 6,\ -10u^{17}a + 23u^{17} + \cdots - 19a + 63,\ u^{18} - u^{17} + \cdots + 3u - 1\rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} a \\ -\frac{2}{5}u^{17}a - \frac{2}{5}u^{17} + \cdots - \frac{1}{5}a - \frac{6}{5} \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} \frac{2}{5}u^{17}a + \frac{2}{5}u^{17} + \cdots + \frac{6}{5}a + \frac{6}{5} \\ -\frac{2}{5}u^{17}a - \frac{2}{5}u^{17} + \cdots - \frac{1}{5}a - \frac{6}{5} \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^2 + 1 \\ u^4 + 2u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.06667au^{17} - 1.26667u^{17} + \cdots + 1.86667a - 1.13333 \\ -0.200000au^{17} - 1.53333u^{17} + \cdots + 0.400000a - 2.93333 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} \frac{2}{5}u^{17}a - \frac{34}{15}u^{17} + \cdots + \frac{6}{5}a - \frac{82}{15} \\ -\frac{2}{5}u^{17}a - \frac{2}{5}u^{17} + \cdots - \frac{1}{5}a - \frac{6}{5} \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1.53333au^{17} - 1.46667u^{17} + \cdots + 2.93333a - 5.40000 \\ -0.400000au^{17} - 1.06667u^{17} + \cdots + 0.800000a - 1.86667 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} \frac{2}{5}u^{17}a - \frac{34}{15}u^{17} + \cdots + \frac{6}{5}a - \frac{97}{15} \\ -1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} \frac{2}{5}u^{17}a - \frac{34}{15}u^{17} + \cdots + \frac{6}{5}a - \frac{97}{15} \\ -1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4u^{17} + 4u^{16} - 36u^{15} + 28u^{14} - 124u^{13} + 72u^{12} - 196u^{11} + 72u^{10} - 120u^9 + 8u^7 - 36u^6 + 8u^5 - 4u^4 - 16u^3 + 8u - 14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_7, c_8 c_{11}	$u^{36} - 3u^{35} + \cdots - 8u + 1$
c_2, c_6	$(u^{18} + u^{17} + \cdots - u - 1)^2$
c_3, c_5	$9(9u^{36} + 27u^{35} + \cdots - 20172u + 3559)$
c_4, c_9, c_{10}	$(u^{18} - u^{17} + \cdots + 3u - 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_7, c_8 c_{11}	$y^{36} + 23y^{35} + \cdots - 16y + 1$
c_2, c_6	$(y^{18} - 15y^{17} + \cdots - 7y + 1)^2$
c_3, c_5	$81(81y^{36} - 1377y^{35} + \cdots - 7.10112 \times 10^7 y + 1.26665 \times 10^7)$
c_4, c_9, c_{10}	$(y^{18} + 17y^{17} + \cdots - 7y + 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.215059 + 1.214380I$ $a = -1.264270 + 0.313519I$ $b = 0.816163 + 1.122800I$	$-5.44315 + 3.22673I$	$-7.05526 - 3.62956I$
$u = -0.215059 + 1.214380I$ $a = 0.121854 - 0.436704I$ $b = 0.27308 - 1.57039I$	$-5.44315 + 3.22673I$	$-7.05526 - 3.62956I$
$u = -0.215059 - 1.214380I$ $a = -1.264270 - 0.313519I$ $b = 0.816163 - 1.122800I$	$-5.44315 - 3.22673I$	$-7.05526 + 3.62956I$
$u = -0.215059 - 1.214380I$ $a = 0.121854 + 0.436704I$ $b = 0.27308 + 1.57039I$	$-5.44315 - 3.22673I$	$-7.05526 + 3.62956I$
$u = 0.678984 + 0.355286I$ $a = -0.359076 + 0.145322I$ $b = -1.008890 + 0.077944I$	$-5.17867 - 5.71427I$	$-7.06596 + 6.05983I$
$u = 0.678984 + 0.355286I$ $a = -0.41568 - 1.94193I$ $b = 0.46000 - 1.36593I$	$-5.17867 - 5.71427I$	$-7.06596 + 6.05983I$
$u = 0.678984 - 0.355286I$ $a = -0.359076 - 0.145322I$ $b = -1.008890 - 0.077944I$	$-5.17867 + 5.71427I$	$-7.06596 - 6.05983I$
$u = 0.678984 - 0.355286I$ $a = -0.41568 + 1.94193I$ $b = 0.46000 + 1.36593I$	$-5.17867 + 5.71427I$	$-7.06596 - 6.05983I$
$u = -0.590027 + 0.406016I$ $a = -0.254655 + 0.532993I$ $b = -0.430436 + 0.146579I$	$-0.86368 + 1.88569I$	$-1.68331 - 3.99357I$
$u = -0.590027 + 0.406016I$ $a = -0.66911 + 1.67095I$ $b = 0.259835 + 0.987292I$	$-0.86368 + 1.88569I$	$-1.68331 - 3.99357I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.590027-0.406016I$ $a=-0.254655-0.532993I$ $b=-0.430436-0.146579I$	$-0.86368-1.88569I$	$-1.68331+3.99357I$
$u=-0.590027-0.406016I$ $a=-0.66911-1.67095I$ $b=0.259835-0.987292I$	$-0.86368-1.88569I$	$-1.68331+3.99357I$
$u=0.482433+0.528989I$ $a=-0.01159-1.42789I$ $b=0.535422+0.229537I$	$-4.41864+1.78695I$	$-5.23943+0.02251I$
$u=0.482433+0.528989I$ $a=-1.59986-0.89994I$ $b=-0.182954-1.202280I$	$-4.41864+1.78695I$	$-5.23943+0.02251I$
$u=0.482433-0.528989I$ $a=-0.01159+1.42789I$ $b=0.535422-0.229537I$	$-4.41864-1.78695I$	$-5.23943-0.02251I$
$u=0.482433-0.528989I$ $a=-1.59986+0.89994I$ $b=-0.182954+1.202280I$	$-4.41864-1.78695I$	$-5.23943-0.02251I$
$u=0.076050+1.298790I$ $a=-0.36644+1.56815I$ $b=0.181838+1.232260I$	$0.06375-1.57187I$	$-1.80878+4.22070I$
$u=0.076050+1.298790I$ $a=-1.80534-0.43101I$ $b=0.393324-0.963175I$	$0.06375-1.57187I$	$-1.80878+4.22070I$
$u=0.076050-1.298790I$ $a=-0.36644-1.56815I$ $b=0.181838-1.232260I$	$0.06375+1.57187I$	$-1.80878-4.22070I$
$u=0.076050-1.298790I$ $a=-1.80534+0.43101I$ $b=0.393324+0.963175I$	$0.06375+1.57187I$	$-1.80878-4.22070I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.663049$ $a=\ 0.21254+1.83196I$ $b=-0.53627+1.36483I$	-9.12242	-12.3720
$u=-0.663049$ $a=\ 0.21254-1.83196I$ $b=-0.53627-1.36483I$	-9.12242	-12.3720
$u=\ 0.17132+1.45278I$ $a=\ 0.948480+0.683751I$ $b=-0.119141+0.939188I$	$1.85527-0.55896I$	$-1.51114-0.25710I$
$u=\ 0.17132+1.45278I$ $a=-0.002433+0.666631I$ $b=\ 0.197872+0.137215I$	$1.85527-0.55896I$	$-1.51114-0.25710I$
$u=\ 0.17132-1.45278I$ $a=\ 0.948480-0.683751I$ $b=-0.119141-0.939188I$	$1.85527+0.55896I$	$-1.51114+0.25710I$
$u=\ 0.17132-1.45278I$ $a=-0.002433-0.666631I$ $b=\ 0.197872-0.137215I$	$1.85527+0.55896I$	$-1.51114+0.25710I$
$u=\ 0.25789+1.44398I$ $a=\ 0.995814+0.788845I$ $b=-0.69402+1.37640I$	$0.60037-9.13509I$	$-2.98695+5.86478I$
$u=\ 0.25789+1.44398I$ $a=-0.379824-0.352640I$ $b=\ 1.211220+0.140810I$	$0.60037-9.13509I$	$-2.98695+5.86478I$
$u=\ 0.25789-1.44398I$ $a=\ 0.995814-0.788845I$ $b=-0.69402-1.37640I$	$0.60037+9.13509I$	$-2.98695-5.86478I$
$u=\ 0.25789-1.44398I$ $a=-0.379824+0.352640I$ $b=\ 1.211220-0.140810I$	$0.60037+9.13509I$	$-2.98695-5.86478I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.22144 + 1.45044I$ $a = \quad 0.938644 - 0.851386I$ $b = -0.554814 - 1.110360I$	$5.09742 + 4.87394I$	$1.52680 - 3.60136I$
$u = -0.22144 + 1.45044I$ $a = -0.195603 + 0.086886I$ $b = \quad 0.855022 - 0.244718I$	$5.09742 + 4.87394I$	$1.52680 - 3.60136I$
$u = -0.22144 - 1.45044I$ $a = \quad 0.938644 + 0.851386I$ $b = -0.554814 + 1.110360I$	$5.09742 - 4.87394I$	$1.52680 + 3.60136I$
$u = -0.22144 - 1.45044I$ $a = -0.195603 - 0.086886I$ $b = \quad 0.855022 + 0.244718I$	$5.09742 - 4.87394I$	$1.52680 + 3.60136I$
$u = \quad 0.382766$ $a = \quad 2.60655 + 3.77847I$ $b = -0.157243 + 1.036420I$	-3.91179	-11.9800
$u = \quad 0.382766$ $a = \quad 2.60655 - 3.77847I$ $b = -0.157243 - 1.036420I$	-3.91179	-11.9800

III. $I_3^u = \langle b-1,\ 4a-u+2,\ u^2+2\rangle$

(i) Arc colorings

$a_5 = \begin{pmatrix} 0 \\ u \end{pmatrix}$

$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$

$a_2 = \begin{pmatrix} \frac{1}{4}u - \frac{1}{2} \\ 1 \end{pmatrix}$

$a_{10} = \begin{pmatrix} 1 \\ -2 \end{pmatrix}$

$a_1 = \begin{pmatrix} \frac{1}{4}u - \frac{3}{2} \\ 1 \end{pmatrix}$

$a_4 = \begin{pmatrix} u \\ -u \end{pmatrix}$

$a_{11} = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$

$a_3 = \begin{pmatrix} \frac{3}{8}u - 1 \\ -\frac{1}{2}u + \frac{1}{2} \end{pmatrix}$

$a_8 = \begin{pmatrix} \frac{1}{4}u + \frac{1}{2} \\ 1 \end{pmatrix}$

$a_6 = \begin{pmatrix} -\frac{1}{8}u + \frac{1}{2} \\ \frac{1}{2}u + \frac{1}{2} \end{pmatrix}$

$a_7 = \begin{pmatrix} \frac{1}{4}u - \frac{1}{2} \\ 1 \end{pmatrix}$

$a_7 = \begin{pmatrix} \frac{1}{4}u - \frac{1}{2} \\ 1 \end{pmatrix}$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 0$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_{11}	$(u+1)^2$
c_3	$4(4u^2+4u+3)$
c_4, c_9, c_{10}	u^2+2
c_5	$4(4u^2-4u+3)$
c_6, c_7, c_8	$(u-1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_7, c_8, c_{11}	$(y-1)^2$
c_3, c_5	$16(16y^2+8y+9)$
c_4, c_9, c_{10}	$(y+2)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = \qquad 1.414210I$ $a = -0.500000 + 0.353553I$ $b = \quad 1.00000$	4.93480	0
$u = \qquad -1.414210I$ $a = -0.500000 - 0.353553I$ $b = \quad 1.00000$	4.93480	0

IV. $I_1^v = \langle a,\ b+1,\ 2v-1 \rangle$

(i) Arc colorings

$a_5 = \begin{pmatrix} 0.5 \\ 0 \end{pmatrix}$

$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$

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

$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$

$a_1 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$

$a_4 = \begin{pmatrix} 0.5 \\ 0 \end{pmatrix}$

$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$

$a_3 = \begin{pmatrix} 1 \\ -0.5 \end{pmatrix}$

$a_8 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$

$a_6 = \begin{pmatrix} 1 \\ 0.5 \end{pmatrix}$

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

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4.5$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2, c_{11}	$u - 1$
c_3	$2(2u + 1)$
c_4, c_9, c_{10}	u
c_5	$2(2u - 1)$
c_6, c_7, c_8	$u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_6 c_7, c_8, c_{11}	$y-1$
c_3, c_5	$4(4y-1)$
c_4, c_9, c_{10}	y

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$v = 0.500000$ $a = 0$ $b = -1.00000$	0	4.50000

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_{11}	$(u-1)(u+1)^2(u^{22}+u^{21}+\cdots-7u-3)(u^{36}-3u^{35}+\cdots-8u+1)$
c_2	$(u-1)(u+1)^2(u^{18}+u^{17}+\cdots-u-1)^2(u^{22}-9u^{20}+\cdots+7u-24)$
c_3	$576(2u+1)(4u^2+4u+3)(8u^{22}-20u^{21}+\cdots-2u^2+1)$ $\cdot(9u^{36}+27u^{35}+\cdots-20172u+3559)$
c_4, c_9, c_{10}	$u(u^2+2)(u^{18}-u^{17}+\cdots+3u-1)^2(u^{22}+3u^{21}+\cdots+56u+8)$
c_5	$576(2u-1)(4u^2-4u+3)(8u^{22}-20u^{21}+\cdots-2u^2+1)$ $\cdot(9u^{36}+27u^{35}+\cdots-20172u+3559)$
c_6	$((u-1)^2)(u+1)(u^{18}+u^{17}+\cdots-u-1)^2(u^{22}-9u^{20}+\cdots+7u-24)$
c_7, c_8	$((u-1)^2)(u+1)(u^{22}+u^{21}+\cdots-7u-3)(u^{36}-3u^{35}+\cdots-8u+1)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_7, c_8 c_{11}	$((y-1)^3)(y^{22}+9y^{21}+\cdots-55y+9)(y^{36}+23y^{35}+\cdots-16y+1)$
c_2, c_6	$((y-1)^3)(y^{18}-15y^{17}+\cdots-7y+1)^2$ $\cdot(y^{22}-18y^{21}+\cdots+335y+576)$
c_3, c_5	$331776(4y-1)(16y^2+8y+9)(64y^{22}-240y^{21}+\cdots-4y+1)$ $\cdot(81y^{36}-1377y^{35}+\cdots-71011164y+12666481)$
c_4, c_9, c_{10}	$y(y+2)^2(y^{18}+17y^{17}+\cdots-7y+1)^2$ $\cdot(y^{22}+21y^{21}+\cdots-480y+64)$