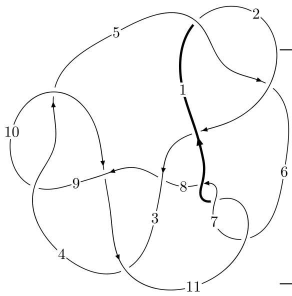
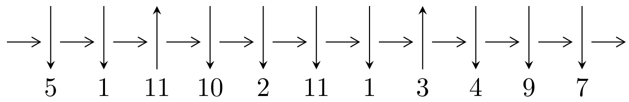
$11n_{105}$ ($K11n_{105}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

$1{,}7 \underset{c_7}{\longrightarrow} 3{,}8 \underset{c_8}{\longrightarrow} 9 \underset{c_2}{\longrightarrow} 2 \underset{c_{11}}{\longrightarrow} 11 \underset{c_3}{\longrightarrow} 4 \underset{c_6}{\longrightarrow} 6 \underset{c_5}{\longrightarrow} 5 \underset{c_{10}}{\longrightarrow} 10 \longrightarrow\!\!\!\!\!\rightarrow c_1, c_4, c_9$

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

$$I_1^u = \langle -u^{17} + u^{16} + \cdots + 8b - 1,\ a + u,\ u^{19} - u^{18} + \cdots + 2u - 1\rangle$$
$$I_2^u = \langle 6724436u^{21} - 6900373u^{20} + \cdots + 11494529b - 7797736,$$
$$3098806u^{21} + 3180019u^{20} + \cdots + 57472645a + 15394503,\ u^{22} - u^{21} + \cdots - 2u + 5\rangle$$
$$I_3^u = \langle b^4 - 4b^3 + 8b^2 - 8b + 5,\ a - 1,\ u + 1\rangle$$
$$I_4^u = \langle b^3 + 3b^2 + 3b + 1,\ a + 1,\ u - 1\rangle$$

* 4 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 48 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. $\boldsymbol{I_1^u = \langle -u^{17} + u^{16} + \cdots + 8b - 1,\ a + u,\ u^{19} - u^{18} + \cdots + 2u - 1 \rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -u \\ \frac{1}{8}u^{17} - \frac{1}{8}u^{16} + \cdots + \frac{3}{4}u + \frac{1}{8} \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} \frac{1}{8}u^{18} - \frac{1}{8}u^{17} + \cdots + \frac{1}{8}u + 1 \\ -\frac{3}{4}u^{18} + \frac{7}{8}u^{17} + \cdots - \frac{5}{4}u + \frac{1}{8} \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -u \\ \frac{1}{8}u^{17} - \frac{1}{8}u^{16} + \cdots + \frac{3}{4}u + \frac{1}{8} \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} \frac{1}{8}u^{17} - \frac{1}{8}u^{16} + \cdots - \frac{5}{4}u + \frac{1}{8} \\ \frac{1}{4}u^{17} - \frac{1}{4}u^{16} + \cdots + \frac{1}{2}u + \frac{1}{4} \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 1 \\ -\frac{1}{8}u^{18} + \frac{1}{8}u^{17} + \cdots - \frac{7}{4}u^2 - \frac{1}{8}u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -\frac{1}{2}u^{18} + \frac{9}{8}u^{17} + \cdots - \frac{5}{2}u + \frac{15}{8} \\ -\frac{7}{8}u^{18} + \frac{17}{8}u^{17} + \cdots - \frac{9}{8}u + 1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -\frac{1}{2}u^{18} + \frac{9}{8}u^{17} + \cdots - \frac{5}{2}u + \frac{15}{8} \\ -\frac{7}{8}u^{18} + \frac{17}{8}u^{17} + \cdots - \frac{9}{8}u + 1 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{5}{2}u^{18} + \frac{11}{4}u^{17} + \frac{15}{4}u^{16} - \frac{25}{4}u^{15} - \frac{37}{2}u^{14} + \frac{93}{4}u^{13} + \frac{27}{2}u^{12} - \frac{123}{4}u^{11} - \frac{139}{4}u^{10} + \frac{191}{4}u^9 + \frac{21}{4}u^8 - \frac{135}{4}u^7 - \frac{41}{4}u^6 + \frac{55}{4}u^5 - \frac{21}{4}u^4 - \frac{17}{4}u^3 + 8u^2 + \frac{7}{2}u - \frac{53}{4}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5, c_6 c_7, c_{11}	$u^{19} + u^{18} + \cdots + 2u + 1$
c_2	$u^{19} + 5u^{18} + \cdots + 10u + 1$
c_3	$u^{19} + 9u^{18} + \cdots + 106u + 14$
c_4, c_9	$u^{19} + 3u^{18} + \cdots + 6u + 2$
c_8	$u^{19} - 3u^{18} + \cdots - 70u + 26$
c_{10}	$u^{19} + 9u^{18} + \cdots + 4u + 4$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5, c_6 c_7, c_{11}	$y^{19} - 5y^{18} + \cdots + 10y - 1$
c_2	$y^{19} + 27y^{18} + \cdots + 38y - 1$
c_3	$y^{19} + 3y^{18} + \cdots + 1044y - 196$
c_4, c_9	$y^{19} - 9y^{18} + \cdots + 4y - 4$
c_8	$y^{19} - 9y^{18} + \cdots - 14444y - 676$
c_{10}	$y^{19} + 3y^{18} + \cdots + 144y - 16$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.777977 + 0.409956I$ $a = 0.777977 - 0.409956I$ $b = 0.369181 + 0.923791I$	$-4.54946 + 5.47873I$	$-11.07465 - 8.55667I$
$u = -0.777977 - 0.409956I$ $a = 0.777977 + 0.409956I$ $b = 0.369181 - 0.923791I$	$-4.54946 - 5.47873I$	$-11.07465 + 8.55667I$
$u = 0.133918 + 0.761043I$ $a = -0.133918 - 0.761043I$ $b = 0.139898 + 0.619393I$	$1.53985 - 2.22177I$	$-2.53368 + 4.26379I$
$u = 0.133918 - 0.761043I$ $a = -0.133918 + 0.761043I$ $b = 0.139898 - 0.619393I$	$1.53985 + 2.22177I$	$-2.53368 - 4.26379I$
$u = 0.647319 + 0.397441I$ $a = -0.647319 - 0.397441I$ $b = 0.063657 + 0.711783I$	$-1.23847 - 1.46671I$	$-6.68531 + 4.74531I$
$u = 0.647319 - 0.397441I$ $a = -0.647319 + 0.397441I$ $b = 0.063657 - 0.711783I$	$-1.23847 + 1.46671I$	$-6.68531 - 4.74531I$
$u = -0.697477 + 0.278835I$ $a = 0.697477 - 0.278835I$ $b = -0.339503 + 1.077420I$	$-4.36768 - 2.62850I$	$-9.97134 - 1.16882I$
$u = -0.697477 - 0.278835I$ $a = 0.697477 + 0.278835I$ $b = -0.339503 - 1.077420I$	$-4.36768 + 2.62850I$	$-9.97134 + 1.16882I$
$u = 1.033800 + 0.730109I$ $a = -1.033800 - 0.730109I$ $b = -0.98428 - 1.15874I$	$-0.86154 - 5.74817I$	$-11.63360 + 4.50327I$
$u = 1.033800 - 0.730109I$ $a = -1.033800 + 0.730109I$ $b = -0.98428 + 1.15874I$	$-0.86154 + 5.74817I$	$-11.63360 - 4.50327I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \ \ 0.887480 + 0.926590I$ $a = -0.887480 - 0.926590I$ $b = \ \ 0.401639 - 1.047330I$	$4.22972 + 0.35072I$	$-6.13837 - 0.22490I$
$u = \ \ 0.887480 - 0.926590I$ $a = -0.887480 + 0.926590I$ $b = \ \ 0.401639 + 1.047330I$	$4.22972 - 0.35072I$	$-6.13837 + 0.22490I$
$u = -0.968832 + 0.893275I$ $a = \ \ 0.968832 - 0.893275I$ $b = -0.058802 - 1.386650I$	$5.51436 + 5.01792I$	$-4.62542 - 4.88249I$
$u = -0.968832 - 0.893275I$ $a = \ \ 0.968832 + 0.893275I$ $b = -0.058802 + 1.386650I$	$5.51436 - 5.01792I$	$-4.62542 + 4.88249I$
$u = -1.107490 + 0.812678I$ $a = \ \ 1.107490 - 0.812678I$ $b = \ \ 0.84460 - 1.89768I$	$4.47255 + 8.26447I$	$-5.93446 - 4.83162I$
$u = -1.107490 - 0.812678I$ $a = \ \ 1.107490 + 0.812678I$ $b = \ \ 0.84460 + 1.89768I$	$4.47255 - 8.26447I$	$-5.93446 + 4.83162I$
$u = \ \ 1.151650 + 0.788448I$ $a = -1.151650 - 0.788448I$ $b = -1.17629 - 2.06224I$	$2.31925 - 13.64210I$	$-8.92588 + 8.81475I$
$u = \ \ 1.151650 - 0.788448I$ $a = -1.151650 + 0.788448I$ $b = -1.17629 + 2.06224I$	$2.31925 + 13.64210I$	$-8.92588 - 8.81475I$
$u = \ \ 0.395222$ $a = -0.395222$ $b = \ \ 0.479812$	-0.957690	-10.9550

II. $\boldsymbol{I_2^u = \langle 6.72\times10^6u^{21} - 6.90\times10^6u^{20} + \cdots + 1.15\times10^7b - 7.80\times10^6,\ 3.10\times10^6u^{21} + 3.18\times10^6u^{20} + \cdots + 5.75\times10^7a + 1.54\times10^7,\ u^{22} - u^{21} + \cdots - 2u + 5\rangle}$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} -0.0539179u^{21} - 0.0553310u^{20} + \cdots - 5.96818u - 0.267858 \\ -0.585012u^{21} + 0.600318u^{20} + \cdots - 1.51708u + 0.678387 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.0828205u^{21} - 0.00564449u^{20} + \cdots + 0.238599u - 2.78491 \\ -0.124555u^{21} + 0.416476u^{20} + \cdots + 0.115943u - 2.65547 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -0.0539179u^{21} - 0.0553310u^{20} + \cdots - 5.96818u - 0.267858 \\ -0.253918u^{21} + 0.144669u^{20} + \cdots - 1.56818u + 0.132142 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.345839u^{21} + 0.500433u^{20} + \cdots - 3.06360u - 0.890633 \\ -0.876933u^{21} + 1.15608u^{20} + \cdots + 1.38750u + 0.0556113 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -0.0264284u^{21} - 0.227490u^{20} + \cdots - 0.137095u - 2.51532 \\ -1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.628809u^{21} + 0.408950u^{20} + \cdots - 0.851245u - 1.74742 \\ -1.23704u^{21} + 1.45113u^{20} + \cdots + 3.35522u + 0.270710 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.628809u^{21} + 0.408950u^{20} + \cdots - 0.851245u - 1.74742 \\ -1.23704u^{21} + 1.45113u^{20} + \cdots + 3.35522u + 0.270710 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{492576}{11494529}u^{21} + \frac{21062536}{11494529}u^{20} + \cdots - \frac{92150964}{11494529}u - \frac{289179942}{11494529}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5, c_6 c_7, c_{11}	$u^{22} + u^{21} + \cdots + 2u + 5$
c_2	$u^{22} + 9u^{21} + \cdots + 224u + 25$
c_3	$(u^{11} - 3u^{10} + 4u^9 - u^8 + 2u^7 - 8u^6 + 8u^5 + 5u^4 - 3u^3 - u^2 + 4u - 1)^2$
c_4, c_9	$(u^{11} - u^{10} - 2u^9 + 3u^8 + 2u^7 - 4u^6 + 3u^4 - u^3 - u^2 + 1)^2$
c_8	$(u^{11} + u^{10} - 6u^9 - 5u^8 + 12u^7 + 6u^6 - 10u^5 + u^4 + 5u^3 - u^2 + 1)^2$
c_{10}	$(u^{11} + 5u^{10} + \cdots + 2u + 1)^2$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5, c_6 c_7, c_{11}	$y^{22} - 9y^{21} + \cdots - 224y + 25$
c_2	$y^{22} + 7y^{21} + \cdots + 5624y + 625$
c_3	$(y^{11} - y^{10} + \cdots + 14y - 1)^2$
c_4, c_9	$(y^{11} - 5y^{10} + \cdots + 2y - 1)^2$
c_8	$(y^{11} - 13y^{10} + \cdots + 2y - 1)^2$
c_{10}	$(y^{11} + 3y^{10} + \cdots - 10y - 1)^2$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.968725 + 0.342171I$ $a = -1.14483 + 0.84471I$ $b = -1.72734 + 0.45538I$	$-4.92613 + 1.27541I$	$-13.47945 - 0.80097I$
$u = 0.968725 - 0.342171I$ $a = -1.14483 - 0.84471I$ $b = -1.72734 - 0.45538I$	$-4.92613 - 1.27541I$	$-13.47945 + 0.80097I$
$u = 0.729583 + 0.772577I$ $a = 0.813042 + 0.684201I$ $b = 0.635345 + 0.872369I$	0.0927065	$-9.81428 + 0.I$
$u = 0.729583 - 0.772577I$ $a = 0.813042 - 0.684201I$ $b = 0.635345 - 0.872369I$	0.0927065	$-9.81428 + 0.I$
$u = 1.182920 + 0.018546I$ $a = -0.183030 - 0.210319I$ $b = 0.415301 - 0.525828I$	$-1.99990 - 0.45477I$	$-4.80492 + 1.36957I$
$u = 1.182920 - 0.018546I$ $a = -0.183030 + 0.210319I$ $b = 0.415301 + 0.525828I$	$-1.99990 + 0.45477I$	$-4.80492 - 1.36957I$
$u = 0.624756 + 1.026890I$ $a = 1.16034 + 0.84838I$ $b = -0.266486 + 1.063010I$	$3.97498 + 7.02220I$	$-6.49946 - 4.88619I$
$u = 0.624756 - 1.026890I$ $a = 1.16034 - 0.84838I$ $b = -0.266486 - 1.063010I$	$3.97498 - 7.02220I$	$-6.49946 + 4.88619I$
$u = -1.195770 + 0.178364I$ $a = 0.591030 + 0.642561I$ $b = 0.87334 + 1.16676I$	$-4.92613 + 1.27541I$	$-13.47945 - 0.80097I$
$u = -1.195770 - 0.178364I$ $a = 0.591030 - 0.642561I$ $b = 0.87334 - 1.16676I$	$-4.92613 - 1.27541I$	$-13.47945 + 0.80097I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.620308 + 0.489049I$ $a = -1.65639 + 1.26230I$ $b = -1.66929 - 0.34266I$	$-3.66655 - 4.75030I$	$-9.35891 + 6.77690I$
$u = 0.620308 - 0.489049I$ $a = -1.65639 - 1.26230I$ $b = -1.66929 + 0.34266I$	$-3.66655 + 4.75030I$	$-9.35891 - 6.77690I$
$u = -0.703026 + 0.993334I$ $a = -1.120470 + 0.746267I$ $b = -0.001089 + 1.272950I$	$5.74879 - 1.64593I$	$-3.95012 + 0.24481I$
$u = -0.703026 - 0.993334I$ $a = -1.120470 - 0.746267I$ $b = -0.001089 - 1.272950I$	$5.74879 + 1.64593I$	$-3.95012 - 0.24481I$
$u = -0.892154 + 0.917804I$ $a = -1.050620 + 0.484687I$ $b = -0.75266 + 1.62251I$	$5.74879 + 1.64593I$	$-3.95012 - 0.24481I$
$u = -0.892154 - 0.917804I$ $a = -1.050620 - 0.484687I$ $b = -0.75266 - 1.62251I$	$5.74879 - 1.64593I$	$-3.95012 + 0.24481I$
$u = -1.282540 + 0.010543I$ $a = 0.117415 - 0.472097I$ $b = -0.481877 - 1.258190I$	$-3.66655 + 4.75030I$	$-9.35891 - 6.77690I$
$u = -1.282540 - 0.010543I$ $a = 0.117415 + 0.472097I$ $b = -0.481877 + 1.258190I$	$-3.66655 - 4.75030I$	$-9.35891 + 6.77690I$
$u = 0.967997 + 0.889244I$ $a = 1.032500 + 0.377033I$ $b = 1.09468 + 1.69502I$	$3.97498 - 7.02220I$	$-6.49946 + 4.88619I$
$u = 0.967997 - 0.889244I$ $a = 1.032500 - 0.377033I$ $b = 1.09468 - 1.69502I$	$3.97498 + 7.02220I$	$-6.49946 - 4.88619I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.520797 + 0.242115I$ $a = 2.24102 + 0.95759I$ $b = 1.380080 - 0.137991I$	$-1.99990 + 0.45477I$	$-4.80492 - 1.36957I$
$u = -0.520797 - 0.242115I$ $a = 2.24102 - 0.95759I$ $b = 1.380080 + 0.137991I$	$-1.99990 - 0.45477I$	$-4.80492 + 1.36957I$

III. $I_3^u = \langle b^4 - 4b^3 + 8b^2 - 8b + 5,\ a - 1,\ u + 1\rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1 \\ b \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -b + 2 \\ -b^2 + b + 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ b - 1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -1 \\ -1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} b \\ 2b - 1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -1 \\ -b \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} b^3 - 4b^2 + 5b - 3 \\ b^3 - 6b^2 + 9b - 7 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} b^3 - 4b^2 + 5b - 3 \\ b^3 - 6b^2 + 9b - 7 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -4b^2 + 8b - 24$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.00000$ $a = \quad 1.00000$ $b = \quad 0.544910 + 1.098680I$	$-5.75727 - 3.66386I$	$-16.0000 + 4.0000I$
$u = -1.00000$ $a = \quad 1.00000$ $b = \quad 0.544910 - 1.098680I$	$-5.75727 + 3.66386I$	$-16.0000 - 4.0000I$
$u = -1.00000$ $a = \quad 1.00000$ $b = \quad 1.45509 + 1.09868I$	$-5.75727 + 3.66386I$	$-16.0000 - 4.0000I$
$u = -1.00000$ $a = \quad 1.00000$ $b = \quad 1.45509 - 1.09868I$	$-5.75727 - 3.66386I$	$-16.0000 + 4.0000I$

IV. $I_4^u = \langle b^3 + 3b^2 + 3b + 1,\ a + 1,\ u - 1 \rangle$

(i) Arc colorings

$$a_1 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -1 \\ b \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} b+2 \\ -b^2 - b + 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -1 \\ b+1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} b \\ 2b+1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -1 \\ b \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} b^2 + 2b + 2 \\ b^2 + 2b + 2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} b^2 + 2b + 2 \\ b^2 + 2b + 2 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 4b^2 + 8b - 8$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I^u_4	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.00000$ $a = -1.00000$ $b = -1.00000$	-3.28987	-12.0000
$u = 1.00000$ $a = -1.00000$ $b = -1.00000$	-3.28987	-12.0000
$u = 1.00000$ $a = -1.00000$ $b = -1.00000$	-3.28987	-12.0000

V. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1, c_6, c_7	$((u-1)^3)(u+1)^4(u^{19}+u^{18}+\cdots+2u+1)(u^{22}+u^{21}+\cdots+2u+5)$
c_2	$((u+1)^7)(u^{19}+5u^{18}+\cdots+10u+1)(u^{22}+9u^{21}+\cdots+224u+25)$
c_3	$u^3(u^4+2u^2+2)$ $\cdot(u^{11}-3u^{10}+4u^9-u^8+2u^7-8u^6+8u^5+5u^4-3u^3-u^2+4u-1)^2$ $\cdot(u^{19}+9u^{18}+\cdots+106u+14)$
c_4, c_9	$u^3(u^4-2u^2+2)(u^{11}-u^{10}+\cdots-u^2+1)^2$ $\cdot(u^{19}+3u^{18}+\cdots+6u+2)$
c_5, c_{11}	$((u-1)^4)(u+1)^3(u^{19}+u^{18}+\cdots+2u+1)(u^{22}+u^{21}+\cdots+2u+5)$
c_8	$u^3(u^4+2u^2+2)$ $\cdot(u^{11}+u^{10}-6u^9-5u^8+12u^7+6u^6-10u^5+u^4+5u^3-u^2+1)^2$ $\cdot(u^{19}-3u^{18}+\cdots-70u+26)$
c_{10}	$u^3(u^2+2u+2)^2(u^{11}+5u^{10}+\cdots+2u+1)^2$ $\cdot(u^{19}+9u^{18}+\cdots+4u+4)$

VI. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5, c_6 c_7, c_{11}	$((y-1)^7)(y^{19} - 5y^{18} + \cdots + 10y - 1)(y^{22} - 9y^{21} + \cdots - 224y + 25)$
c_2	$((y-1)^7)(y^{19} + 27y^{18} + \cdots + 38y - 1)(y^{22} + 7y^{21} + \cdots + 5624y + 625)$
c_3	$y^3(y^2 + 2y + 2)^2(y^{11} - y^{10} + \cdots + 14y - 1)^2$ $\cdot (y^{19} + 3y^{18} + \cdots + 1044y - 196)$
c_4, c_9	$y^3(y^2 - 2y + 2)^2(y^{11} - 5y^{10} + \cdots + 2y - 1)^2$ $\cdot (y^{19} - 9y^{18} + \cdots + 4y - 4)$
c_8	$y^3(y^2 + 2y + 2)^2(y^{11} - 13y^{10} + \cdots + 2y - 1)^2$ $\cdot (y^{19} - 9y^{18} + \cdots - 14444y - 676)$
c_{10}	$y^3(y^2 + 4)^2(y^{11} + 3y^{10} + \cdots - 10y - 1)^2$ $\cdot (y^{19} + 3y^{18} + \cdots + 144y - 16)$