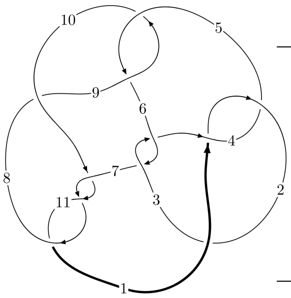
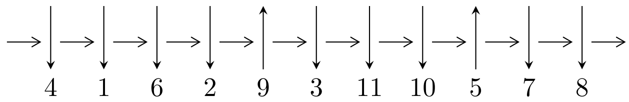
$11a_{20}$ $(K11a_{20})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$
\begin{aligned}
I_1^u = \langle & -2.27448 \times 10^{21} u^{63} + 1.27056 \times 10^{22} u^{62} + \cdots + 4.69870 \times 10^{20} b + 1.19330 \times 10^{21}, \\
& -5.52423 \times 10^{21} u^{63} + 2.53933 \times 10^{22} u^{62} + \cdots + 9.39740 \times 10^{20} a + 2.28536 \times 10^{20},\ u^{64} - 7u^{63} + \cdots + u +
\end{aligned}
$$

$$I_2^u = \langle -a^4 + a^3 - a^2 + b + 2a - 1,\ a^5 - a^4 + a^3 - 2a^2 + a - 1,\ u + 1 \rangle$$

$$I_3^u = \langle b,\ u^2 + a - 2u + 1,\ u^3 - u^2 + 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 72 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.

$$I_1^u = \langle -2.27\times10^{21}u^{63}+1.27\times10^{22}u^{62}+\cdots+4.70\times10^{20}b+1.19\times10^{21},\ -5.52\times10^{21}u^{63}+2.54\times10^{22}u^{62}+\cdots+9.40\times10^{20}a+2.29\times10^{20},\ u^{64}-7u^{63}+\cdots+u+1\rangle$$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u \\ -u^3 + u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^3 \\ u^5 - u^3 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 5.87847u^{63} - 27.0216u^{62} + \cdots + 28.2191u - 0.243190 \\ 4.84066u^{63} - 27.0407u^{62} + \cdots + 0.696184u - 2.53964 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1.03781u^{63} + 0.0190663u^{62} + \cdots + 27.5230u + 2.29645 \\ 4.84066u^{63} - 27.0407u^{62} + \cdots + 0.696184u - 2.53964 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 10.4449u^{63} - 79.7256u^{62} + \cdots - 50.1840u - 25.9116 \\ 0.631883u^{63} + 8.05715u^{62} + \cdots + 34.0330u + 11.6574 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 5.78835u^{63} - 39.8513u^{62} + \cdots - 14.9790u - 11.2988 \\ -2.02198u^{63} + 22.2471u^{62} + \cdots + 31.7864u + 11.7439 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 13.3094u^{63} - 73.2209u^{62} + \cdots + 17.5988u - 8.10092 \\ -4.44093u^{63} + 37.8664u^{62} + \cdots + 36.2343u + 13.7317 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 17.7393u^{63} - 103.819u^{62} + \cdots + 2.17710u - 17.2081 \\ -2.67789u^{63} + 31.9650u^{62} + \cdots + 50.1233u + 17.4101 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 17.7393u^{63} - 103.819u^{62} + \cdots + 2.17710u - 17.2081 \\ -2.67789u^{63} + 31.9650u^{62} + \cdots + 50.1233u + 17.4101 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= \frac{2720935457231122035033}{469870013462984070152}u^{63} - \frac{8461485863841657548067}{469870013462984070152}u^{62} + \cdots + \frac{1415199546550180581656 3}{469870013462984070152}u + \frac{1148701840102396678745}{117467503365746017538}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_4	$u^{64} - 7u^{63} + \cdots + u + 1$
c_2	$u^{64} + 29u^{63} + \cdots + 27u + 1$
c_3, c_6	$u^{64} - 2u^{63} + \cdots + 64u - 32$
c_5, c_9	$u^{64} - 2u^{63} + \cdots + 4u + 8$
c_7, c_{10}, c_{11}	$u^{64} - 5u^{63} + \cdots + 14u - 1$
c_8	$u^{64} + 24u^{63} + \cdots - 464u + 64$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_4	$y^{64} - 29y^{63} + \cdots - 27y + 1$
c_2	$y^{64} + 19y^{63} + \cdots - 2587y + 1$
c_3, c_6	$y^{64} + 36y^{63} + \cdots + 7680y + 1024$
c_5, c_9	$y^{64} + 24y^{63} + \cdots - 464y + 64$
c_7, c_{10}, c_{11}	$y^{64} - 55y^{63} + \cdots - 294y + 1$
c_8	$y^{64} + 28y^{63} + \cdots - 1248512y + 4096$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.892738 + 0.448763I$ $a = -0.677948 - 0.577752I$ $b = -1.105160 + 0.138131I$	$-3.21351 - 1.80870I$	0
$u = 0.892738 - 0.448763I$ $a = -0.677948 + 0.577752I$ $b = -1.105160 - 0.138131I$	$-3.21351 + 1.80870I$	0
$u = 0.455631 + 0.904878I$ $a = -1.188140 - 0.429481I$ $b = -0.722344 - 0.983370I$	$5.23941 + 5.04408I$	0
$u = 0.455631 - 0.904878I$ $a = -1.188140 + 0.429481I$ $b = -0.722344 + 0.983370I$	$5.23941 - 5.04408I$	0
$u = 0.458581 + 0.849452I$ $a = 1.68790 - 0.08561I$ $b = 0.950572 - 0.661117I$	$1.85655 + 3.18076I$	$-7.00000 + 0.I$
$u = 0.458581 - 0.849452I$ $a = 1.68790 + 0.08561I$ $b = 0.950572 + 0.661117I$	$1.85655 - 3.18076I$	$-7.00000 + 0.I$
$u = 0.513790 + 0.814105I$ $a = 1.137550 + 0.030043I$ $b = 0.641399 + 0.876706I$	$2.25186 + 0.42541I$	$-7.00000 + 0.I$
$u = 0.513790 - 0.814105I$ $a = 1.137550 - 0.030043I$ $b = 0.641399 - 0.876706I$	$2.25186 - 0.42541I$	$-7.00000 + 0.I$
$u = 0.575812 + 0.867424I$ $a = -1.40928 + 0.24972I$ $b = -0.808864 + 0.726024I$	$6.03567 - 0.70423I$	0
$u = 0.575812 - 0.867424I$ $a = -1.40928 - 0.24972I$ $b = -0.808864 - 0.726024I$	$6.03567 + 0.70423I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.404010 + 0.961178I$ $a = 1.161090 + 0.684160I$ $b = 0.751183 + 1.083290I$	$0.50492 + 9.42816I$	0
$u = 0.404010 - 0.961178I$ $a = 1.161090 - 0.684160I$ $b = 0.751183 - 1.083290I$	$0.50492 - 9.42816I$	0
$u = -0.926583 + 0.484056I$ $a = -1.11157 + 1.26592I$ $b = -0.870442 + 0.528800I$	$-2.88218 + 3.00440I$	0
$u = -0.926583 - 0.484056I$ $a = -1.11157 - 1.26592I$ $b = -0.870442 - 0.528800I$	$-2.88218 - 3.00440I$	0
$u = -1.043140 + 0.195913I$ $a = -0.91468 + 1.70928I$ $b = 0.025861 - 0.692002I$	$-2.98471 + 0.79780I$	0
$u = -1.043140 - 0.195913I$ $a = -0.91468 - 1.70928I$ $b = 0.025861 + 0.692002I$	$-2.98471 - 0.79780I$	0
$u = 0.942735 + 0.500566I$ $a = 0.607864 + 1.224530I$ $b = 0.012514 - 1.072630I$	$-1.51825 - 4.24420I$	0
$u = 0.942735 - 0.500566I$ $a = 0.607864 - 1.224530I$ $b = 0.012514 + 1.072630I$	$-1.51825 + 4.24420I$	0
$u = -0.842329 + 0.399836I$ $a = -2.62253 + 0.97033I$ $b = -0.487811 - 0.667717I$	$-2.41667 + 0.68003I$	$-10.70240 - 3.97154I$
$u = -0.842329 - 0.399836I$ $a = -2.62253 - 0.97033I$ $b = -0.487811 + 0.667717I$	$-2.41667 - 0.68003I$	$-10.70240 + 3.97154I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.643524 + 0.662505I$ $a = -0.81928 + 1.53795I$ $b = -0.573528 + 0.999433I$	$-3.53655 - 3.75839I$	$-9.90897 + 2.47413I$
$u = -0.643524 - 0.662505I$ $a = -0.81928 - 1.53795I$ $b = -0.573528 - 0.999433I$	$-3.53655 + 3.75839I$	$-9.90897 - 2.47413I$
$u = -0.924487 + 0.552399I$ $a = 2.35170 - 0.32648I$ $b = 0.638310 + 0.930488I$	$0.23940 + 4.71266I$	0
$u = -0.924487 - 0.552399I$ $a = 2.35170 + 0.32648I$ $b = 0.638310 - 0.930488I$	$0.23940 - 4.71266I$	0
$u = -0.750013 + 0.530556I$ $a = 0.92021 - 1.37826I$ $b = 0.649111 - 0.745774I$	$0.803950 - 0.315255I$	$-4.55635 + 0.I$
$u = -0.750013 - 0.530556I$ $a = 0.92021 + 1.37826I$ $b = 0.649111 + 0.745774I$	$0.803950 + 0.315255I$	$-4.55635 + 0.I$
$u = 0.813121 + 0.418560I$ $a = -0.127255 - 1.035700I$ $b = 0.284466 + 1.063420I$	$-0.924060 + 0.442031I$	$-7.00000 + 0.I$
$u = 0.813121 - 0.418560I$ $a = -0.127255 + 1.035700I$ $b = 0.284466 - 1.063420I$	$-0.924060 - 0.442031I$	$-7.00000 + 0.I$
$u = 0.861442 + 0.662767I$ $a = 0.499053 + 0.320374I$ $b = 0.602748 - 0.054842I$	$2.28792 - 2.57835I$	0
$u = 0.861442 - 0.662767I$ $a = 0.499053 - 0.320374I$ $b = 0.602748 + 0.054842I$	$2.28792 + 2.57835I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.841966 + 0.249603I$ $a = 0.106480 + 0.758428I$ $b = -0.493505 - 1.278120I$	$-7.08020 + 3.75832I$	$-7.89460 + 2.35018I$
$u = 0.841966 - 0.249603I$ $a = 0.106480 - 0.758428I$ $b = -0.493505 + 1.278120I$	$-7.08020 - 3.75832I$	$-7.89460 - 2.35018I$
$u = 0.692342 + 0.906468I$ $a = 1.135280 - 0.491124I$ $b = 0.613430 - 0.823572I$	$2.43022 - 4.49300I$	0
$u = 0.692342 - 0.906468I$ $a = 1.135280 + 0.491124I$ $b = 0.613430 + 0.823572I$	$2.43022 + 4.49300I$	0
$u = -0.988405 + 0.608854I$ $a = -2.21838 + 0.08688I$ $b = -0.675315 - 1.087940I$	$-4.58177 + 8.71812I$	0
$u = -0.988405 - 0.608854I$ $a = -2.21838 - 0.08688I$ $b = -0.675315 + 1.087940I$	$-4.58177 - 8.71812I$	0
$u = 1.083340 + 0.462764I$ $a = -0.909615 - 0.728843I$ $b = -0.220258 + 1.351590I$	$-8.76429 - 6.48628I$	0
$u = 1.083340 - 0.462764I$ $a = -0.909615 + 0.728843I$ $b = -0.220258 - 1.351590I$	$-8.76429 + 6.48628I$	0
$u = -0.814631$ $a = -0.747058$ $b = -0.242726$	-1.19032	-8.27220
$u = -1.188330 + 0.101883I$ $a = 0.944463 - 1.011510I$ $b = 0.755044 + 0.405276I$	$-3.86010 - 0.85522I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -1.188330 - 0.101883I$ $a = 0.944463 + 1.011510I$ $b = 0.755044 - 0.405276I$	$-3.86010 + 0.85522I$	0
$u = -1.190870 + 0.376705I$ $a = 1.075110 - 0.386024I$ $b = 0.047966 + 1.176860I$	$-9.32581 + 1.34639I$	0
$u = -1.190870 - 0.376705I$ $a = 1.075110 + 0.386024I$ $b = 0.047966 - 1.176860I$	$-9.32581 - 1.34639I$	0
$u = 1.081320 + 0.644153I$ $a = 1.66629 + 1.06042I$ $b = 0.541565 - 0.991647I$	$0.54026 - 5.89102I$	0
$u = 1.081320 - 0.644153I$ $a = 1.66629 - 1.06042I$ $b = 0.541565 + 0.991647I$	$0.54026 + 5.89102I$	0
$u = 1.062570 + 0.695609I$ $a = -0.374719 - 0.834857I$ $b = -0.838497 - 0.611622I$	$4.55904 - 5.08051I$	0
$u = 1.062570 - 0.695609I$ $a = -0.374719 + 0.834857I$ $b = -0.838497 + 0.611622I$	$4.55904 + 5.08051I$	0
$u = -1.272150 + 0.077417I$ $a = -0.289723 - 0.748311I$ $b = -0.589111 + 0.855580I$	$-0.94885 - 2.33285I$	0
$u = -1.272150 - 0.077417I$ $a = -0.289723 + 0.748311I$ $b = -0.589111 - 0.855580I$	$-0.94885 + 2.33285I$	0
$u = 1.007050 + 0.790636I$ $a = 0.061235 + 0.831316I$ $b = 0.477046 + 0.732746I$	$1.48618 - 1.70443I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.007050 - 0.790636I$ $a = 0.061235 - 0.831316I$ $b = 0.477046 - 0.732746I$	$1.48618 + 1.70443I$	0
$u = 1.114390 + 0.645519I$ $a = 0.525778 + 0.875080I$ $b = 1.057350 + 0.612780I$	$-0.11555 - 8.73931I$	0
$u = 1.114390 - 0.645519I$ $a = 0.525778 - 0.875080I$ $b = 1.057350 - 0.612780I$	$-0.11555 + 8.73931I$	0
$u = -0.043869 + 0.693831I$ $a = 0.223595 - 1.043440I$ $b = -0.179019 - 1.111590I$	$-5.83041 + 2.67272I$	$-11.08007 - 3.60014I$
$u = -0.043869 - 0.693831I$ $a = 0.223595 + 1.043440I$ $b = -0.179019 + 1.111590I$	$-5.83041 - 2.67272I$	$-11.08007 + 3.60014I$
$u = 1.134300 + 0.665213I$ $a = -1.79581 - 0.80258I$ $b = -0.694107 + 1.060630I$	$3.18001 - 10.81860I$	0
$u = 1.134300 - 0.665213I$ $a = -1.79581 + 0.80258I$ $b = -0.694107 - 1.060630I$	$3.18001 + 10.81860I$	0
$u = 1.174860 + 0.664654I$ $a = 1.79983 + 0.62712I$ $b = 0.769782 - 1.149600I$	$-1.8513 - 15.3455I$	0
$u = 1.174860 - 0.664654I$ $a = 1.79983 - 0.62712I$ $b = 0.769782 + 1.149600I$	$-1.8513 + 15.3455I$	0
$u = -1.344220 + 0.130440I$ $a = 0.177278 + 0.405955I$ $b = 0.617471 - 1.071230I$	$-5.71689 - 6.00573I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.344220-0.130440I$ $a=\ \ 0.177278-0.405955I$ $b=\ \ 0.617471+1.071230I$	$-5.71689+6.00573I$	0
$u=\ \ 0.029039+0.244733I$ $a=-1.77560+0.47939I$ $b=\ \ 0.227592+0.697212I$	$-0.369684+1.136730I$	$-4.87497-6.04552I$
$u=\ \ 0.029039-0.244733I$ $a=-1.77560-0.47939I$ $b=\ \ 0.227592-0.697212I$	$-0.369684-1.136730I$	$-4.87497+6.04552I$
$u=-0.147593$ $a=-6.94526$ $b=-0.568177$	-2.17596	-2.85460

II. $\boldsymbol{I_2^u = \langle -a^4 + a^3 - a^2 + b + 2a - 1,\ a^5 - a^4 + a^3 - 2a^2 + a - 1,\ u + 1\rangle}$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -5a^4 + 5a^3 + 7a - 14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u-1)^5$
c_2, c_4	$(u+1)^5$
c_3, c_6	u^5
c_5	$u^5 - u^4 + 2u^3 - u^2 + u - 1$
c_7	$u^5 + u^4 - 2u^3 - u^2 + u - 1$
c_8	$u^5 - 3u^4 + 4u^3 - u^2 - u + 1$
c_9	$u^5 + u^4 + 2u^3 + u^2 + u + 1$
c_{10}, c_{11}	$u^5 - u^4 - 2u^3 + u^2 + u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^5$
c_3, c_6	y^5
c_5, c_9	$y^5 + 3y^4 + 4y^3 + y^2 - y - 1$
c_7, c_{10}, c_{11}	$y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1$
c_8	$y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.00000$ $a=-0.428550+1.039280I$ $b=-0.339110-0.822375I$	$-1.97403+1.53058I$	$-10.50099-3.45976I$
$u=-1.00000$ $a=-0.428550-1.039280I$ $b=-0.339110+0.822375I$	$-1.97403-1.53058I$	$-10.50099+3.45976I$
$u=-1.00000$ $a=\ 0.276511+0.728237I$ $b=\ 0.455697-1.200150I$	$-7.51750-4.40083I$	$-14.3774+5.8297I$
$u=-1.00000$ $a=\ 0.276511-0.728237I$ $b=\ 0.455697+1.200150I$	$-7.51750+4.40083I$	$-14.3774-5.8297I$
$u=-1.00000$ $a=\ 1.30408$ $b=\ 0.766826$	-4.04602	-8.24330

III. $\boldsymbol{I_3^u = \langle b,\ u^2 + a - 2u + 1,\ u^3 - u^2 + 1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} u \\ -u^2 + u + 1 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -u^2 + 1 \\ -u^2 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -u^2 + 2u - 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -u^2 + 2u - 1 \\ 0 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -u \\ u^2 - u - 1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} -u^2 + 2u - 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^2 + 3u - 1 \\ -u^2 + u + 1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^2 + 3u - 1 \\ -u^2 + u + 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^2 + 8u - 16$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.877439 + 0.744862I$ $a = 0.539798 + 0.182582I$ $b = 0$	$1.37919 - 2.82812I$	$-9.19557 + 4.65175I$
$u = 0.877439 - 0.744862I$ $a = 0.539798 - 0.182582I$ $b = 0$	$1.37919 + 2.82812I$	$-9.19557 - 4.65175I$
$u = -0.754878$ $a = -3.07960$ $b = 0$	-2.75839	-22.6090

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^5)(u^3+u^2-1)(u^{64}-7u^{63}+\cdots+u+1)$
c_2	$((u+1)^5)(u^3+u^2+2u+1)(u^{64}+29u^{63}+\cdots+27u+1)$
c_3	$u^5(u^3-u^2+2u-1)(u^{64}-2u^{63}+\cdots+64u-32)$
c_4	$((u+1)^5)(u^3-u^2+1)(u^{64}-7u^{63}+\cdots+u+1)$
c_5	$u^3(u^5-u^4+\cdots+u-1)(u^{64}-2u^{63}+\cdots+4u+8)$
c_6	$u^5(u^3+u^2+2u+1)(u^{64}-2u^{63}+\cdots+64u-32)$
c_7	$((u-1)^3)(u^5+u^4+\cdots+u-1)(u^{64}-5u^{63}+\cdots+14u-1)$
c_8	$u^3(u^5-3u^4+\cdots-u+1)(u^{64}+24u^{63}+\cdots-464u+64)$
c_9	$u^3(u^5+u^4+\cdots+u+1)(u^{64}-2u^{63}+\cdots+4u+8)$
c_{10}, c_{11}	$((u+1)^3)(u^5-u^4+\cdots+u+1)(u^{64}-5u^{63}+\cdots+14u-1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_4	$((y-1)^5)(y^3 - y^2 + 2y - 1)(y^{64} - 29y^{63} + \cdots - 27y + 1)$
c_2	$((y-1)^5)(y^3 + 3y^2 + 2y - 1)(y^{64} + 19y^{63} + \cdots - 2587y + 1)$
c_3, c_6	$y^5(y^3 + 3y^2 + 2y - 1)(y^{64} + 36y^{63} + \cdots + 7680y + 1024)$
c_5, c_9	$y^3(y^5 + 3y^4 + \cdots - y - 1)(y^{64} + 24y^{63} + \cdots - 464y + 64)$
c_7, c_{10}, c_{11}	$((y-1)^3)(y^5 - 5y^4 + \cdots - y - 1)(y^{64} - 55y^{63} + \cdots - 294y + 1)$
c_8	$y^3(y^5 - y^4 + \cdots + 3y - 1)(y^{64} + 28y^{63} + \cdots - 1248512y + 4096)$