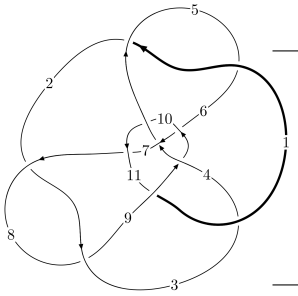
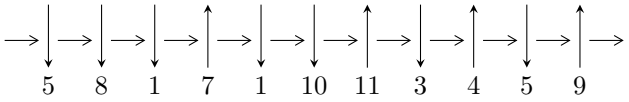
$11n_{177}$ $(K11n_{177})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & -3.24572 \times 10^{142} u^{60} + 1.72689 \times 10^{142} u^{59} + \cdots + 4.07698 \times 10^{142} b - 1.22998 \times 10^{145}, \\ & - 2.97918 \times 10^{145} u^{60} + 1.11595 \times 10^{145} u^{59} + \cdots + 8.60243 \times 10^{144} a - 1.02025 \times 10^{148}, \\ & u^{61} - u^{60} + \cdots + 1440u - 211 \rangle \\ I_2^u = \langle & -191u^{19} - 54u^{18} + \cdots + 871b - 1760,\ -5462u^{19} + 3472u^{18} + \cdots + 871a - 3488, \\ & u^{20} - 10u^{18} + \cdots - 3u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 81 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. $\boldsymbol{I_1^u = \langle -3.25 \times 10^{142} u^{60} + 1.73 \times 10^{142} u^{59} + \cdots + 4.08 \times 10^{142} b - 1.23 \times 10^{145},\ -2.98 \times 10^{145} u^{60} + 1.12 \times 10^{145} u^{59} + \cdots + 8.60 \times 10^{144} a - 1.02 \times 10^{148},\ u^{61} - u^{60} + \cdots + 1440u - 211 \rangle}$

(i) Arc colorings

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

$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 3.46318u^{60} - 1.29725u^{59} + \cdots - 6140.42u + 1186.01 \\ 0.796110u^{60} - 0.423570u^{59} + \cdots - 1559.98u + 301.690 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 1.29224u^{60} - 0.448881u^{59} + \cdots - 2255.76u + 429.617 \\ 1.27366u^{60} - 0.370816u^{59} + \cdots - 2085.03u + 390.903 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.28221u^{60} - 0.453127u^{59} + \cdots - 2204.36u + 413.438 \\ -0.635387u^{60} + 0.249195u^{59} + \cdots + 1132.30u - 216.875 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0.388456u^{60} - 0.195779u^{59} + \cdots - 775.545u + 151.289 \\ 1.67899u^{60} - 0.538031u^{59} + \cdots - 2818.97u + 531.938 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -0.630060u^{60} + 0.197657u^{59} + \cdots + 1058.49u - 208.443 \\ -2.03043u^{60} + 0.716573u^{59} + \cdots + 3492.84u - 661.096 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.747989u^{60} + 0.276535u^{59} + \cdots + 1286.06u - 236.612 \\ 0.433328u^{60} - 0.123845u^{59} + \cdots - 717.355u + 135.073 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1.16771u^{60} + 0.323667u^{59} + \cdots + 1929.57u - 371.367 \\ -1.29217u^{60} + 0.498917u^{59} + \cdots + 2268.85u - 430.204 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -1.16771u^{60} + 0.323667u^{59} + \cdots + 1929.57u - 371.367 \\ -1.29217u^{60} + 0.498917u^{59} + \cdots + 2268.85u - 430.204 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -7.66374u^{60} + 2.83409u^{59} + \cdots + 13662.1u - 2642.77$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_5	$u^{61} + 2u^{60} + \cdots - 25u + 1$
c_2, c_8	$u^{61} - u^{60} + \cdots + 1440u - 211$
c_3	$u^{61} - 4u^{60} + \cdots - 957u + 121$
c_4	$u^{61} + 6u^{60} + \cdots + 22u + 1$
c_6	$u^{61} + 4u^{60} + \cdots + 6790u - 2531$
c_7	$u^{61} + u^{60} + \cdots - 9850u - 2333$
c_9	$u^{61} + 2u^{60} + \cdots + 529u + 41$
c_{10}	$u^{61} - 10u^{59} + \cdots - 62973u + 14123$
c_{11}	$u^{61} - 4u^{60} + \cdots + 6u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{61} - 54y^{60} + \cdots + 111y - 1$
c_2, c_8	$y^{61} - 57y^{60} + \cdots + 631204y - 44521$
c_3	$y^{61} - 28y^{60} + \cdots + 684255y - 14641$
c_4	$y^{61} - 16y^{60} + \cdots + 364y - 1$
c_6	$y^{61} - 14y^{60} + \cdots + 234688910y - 6405961$
c_7	$y^{61} + 23y^{60} + \cdots + 27116488y - 5442889$
c_9	$y^{61} + 52y^{59} + \cdots - 12653y - 1681$
c_{10}	$y^{61} - 20y^{60} + \cdots + 4161767199y - 199459129$
c_{11}	$y^{61} - 8y^{60} + \cdots + 12y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.976776+0.468629I$ $a=-0.15466-1.57760I$ $b=-1.360820+0.112274I$	$-3.79970+5.99586I$	0
$u=-0.976776-0.468629I$ $a=-0.15466+1.57760I$ $b=-1.360820-0.112274I$	$-3.79970-5.99586I$	0
$u=-0.524227+0.745772I$ $a=-0.531624+0.534873I$ $b=\ 1.50782-0.08700I$	$-2.50680-1.31837I$	0
$u=-0.524227-0.745772I$ $a=-0.531624-0.534873I$ $b=\ 1.50782+0.08700I$	$-2.50680+1.31837I$	0
$u=\ 0.678087+0.569708I$ $a=\ 0.116142-0.826864I$ $b=-0.368363+0.027145I$	$1.88623-2.18277I$	0
$u=\ 0.678087-0.569708I$ $a=\ 0.116142+0.826864I$ $b=-0.368363-0.027145I$	$1.88623+2.18277I$	0
$u=\ 0.868659+0.085320I$ $a=\ 0.448202+1.164690I$ $b=-0.064748+1.346320I$	$4.49837-0.35042I$	$4.30932-5.56885I$
$u=\ 0.868659-0.085320I$ $a=\ 0.448202-1.164690I$ $b=-0.064748-1.346320I$	$4.49837+0.35042I$	$4.30932+5.56885I$
$u=\ 1.127820+0.013378I$ $a=\ 0.848633-0.329495I$ $b=\ 0.484117+0.888170I$	$0.28694-2.95538I$	0
$u=\ 1.127820-0.013378I$ $a=\ 0.848633+0.329495I$ $b=\ 0.484117-0.888170I$	$0.28694+2.95538I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.827402+0.215446I$ $a=\ \ 0.369344+0.142430I$ $b=\ \ 0.572552-0.128270I$	$-1.311000+0.288972I$	$-7.97577+0.I$
$u=-0.827402-0.215446I$ $a=\ \ 0.369344-0.142430I$ $b=\ \ 0.572552+0.128270I$	$-1.311000-0.288972I$	$-7.97577+0.I$
$u=\ \ 0.430791+0.712040I$ $a=\ \ 0.206810-0.287330I$ $b=-0.162616-0.032660I$	$2.67011+1.18908I$	$-3.00000+2.70122I$
$u=\ \ 0.430791-0.712040I$ $a=\ \ 0.206810+0.287330I$ $b=-0.162616+0.032660I$	$2.67011-1.18908I$	$-3.00000-2.70122I$
$u=\ \ 1.101970+0.412324I$ $a=-0.694898-0.236565I$ $b=\ \ 0.101449+0.170923I$	$-2.45305-5.61811I$	0
$u=\ \ 1.101970-0.412324I$ $a=-0.694898+0.236565I$ $b=\ \ 0.101449-0.170923I$	$-2.45305+5.61811I$	0
$u=\ \ 0.725508+0.953905I$ $a=\ \ 0.42999-1.48215I$ $b=\ \ 0.16870+1.40882I$	$4.00502-3.50717I$	0
$u=\ \ 0.725508-0.953905I$ $a=\ \ 0.42999+1.48215I$ $b=\ \ 0.16870-1.40882I$	$4.00502+3.50717I$	0
$u=-1.21359$ $a=-2.56444$ $b=-1.62558$	-4.17679	0
$u=\ \ 1.072200+0.597671I$ $a=\ \ 0.029187-0.276448I$ $b=-0.0817486+0.0591173I$	$0.79598-6.19961I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.072200 - 0.597671I$ $a = 0.029187 + 0.276448I$ $b = -0.0817486 - 0.0591173I$	$0.79598 + 6.19961I$	0
$u = -0.325827 + 0.608474I$ $a = 0.939738 + 0.068849I$ $b = 1.142560 + 0.067073I$	$-1.23241 - 1.81263I$	$4.83572 + 3.41464I$
$u = -0.325827 - 0.608474I$ $a = 0.939738 - 0.068849I$ $b = 1.142560 - 0.067073I$	$-1.23241 + 1.81263I$	$4.83572 - 3.41464I$
$u = -1.296100 + 0.257994I$ $a = -1.94339 - 0.43070I$ $b = -1.63146 - 0.09947I$	$-4.62267 + 5.03624I$	0
$u = -1.296100 - 0.257994I$ $a = -1.94339 + 0.43070I$ $b = -1.63146 + 0.09947I$	$-4.62267 - 5.03624I$	0
$u = -1.318920 + 0.232232I$ $a = 0.289966 - 0.419451I$ $b = 0.121333 - 1.299240I$	$-4.69632 + 0.83070I$	0
$u = -1.318920 - 0.232232I$ $a = 0.289966 + 0.419451I$ $b = 0.121333 + 1.299240I$	$-4.69632 - 0.83070I$	0
$u = -1.355280 + 0.007498I$ $a = 2.05034 + 0.41832I$ $b = 1.57888 - 0.10960I$	$-8.02679 - 3.97936I$	0
$u = -1.355280 - 0.007498I$ $a = 2.05034 - 0.41832I$ $b = 1.57888 + 0.10960I$	$-8.02679 + 3.97936I$	0
$u = 0.641002 + 0.014713I$ $a = 0.47554 - 2.09406I$ $b = -0.425124 - 0.689408I$	$2.15550 - 2.60300I$	$-3.71097 + 4.89250I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.641002 - 0.014713I$ $a = 0.47554 + 2.09406I$ $b = -0.425124 + 0.689408I$	$2.15550 + 2.60300I$	$-3.71097 - 4.89250I$
$u = 1.380460 + 0.006140I$ $a = -0.106176 - 1.042480I$ $b = -0.152247 + 0.537690I$	$0.20782 - 3.93388I$	0
$u = 1.380460 - 0.006140I$ $a = -0.106176 + 1.042480I$ $b = -0.152247 - 0.537690I$	$0.20782 + 3.93388I$	0
$u = 1.371230 + 0.218015I$ $a = 1.64543 - 0.22255I$ $b = 1.62447 + 0.87740I$	$-8.65446 - 7.29554I$	0
$u = 1.371230 - 0.218015I$ $a = 1.64543 + 0.22255I$ $b = 1.62447 - 0.87740I$	$-8.65446 + 7.29554I$	0
$u = 0.256892 + 0.520615I$ $a = 0.962604 + 0.557526I$ $b = -0.018225 - 0.428123I$	$-0.17125 + 1.80764I$	$-1.37492 - 3.40193I$
$u = 0.256892 - 0.520615I$ $a = 0.962604 - 0.557526I$ $b = -0.018225 + 0.428123I$	$-0.17125 - 1.80764I$	$-1.37492 + 3.40193I$
$u = -0.27863 + 1.40849I$ $a = -0.172968 - 0.248864I$ $b = -1.61867 + 0.35060I$	$-2.68997 + 9.29142I$	0
$u = -0.27863 - 1.40849I$ $a = -0.172968 + 0.248864I$ $b = -1.61867 - 0.35060I$	$-2.68997 - 9.29142I$	0
$u = -0.16045 + 1.43558I$ $a = 0.287870 + 0.352022I$ $b = 1.44542 - 0.44164I$	$-4.00110 + 1.61857I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.16045-1.43558I$ $a=\ \ 0.287870-0.352022I$ $b=\ \ 1.44542+0.44164I$	$-4.00110-1.61857I$	0
$u=-0.550059$ $a=-0.221675$ $b=\ \ 1.15486$	-1.86682	-10.5560
$u=\ \ 1.44832+0.14867I$ $a=-1.62095+0.20059I$ $b=-1.65615-0.59781I$	$-9.14900-1.39395I$	0
$u=\ \ 1.44832-0.14867I$ $a=-1.62095-0.20059I$ $b=-1.65615+0.59781I$	$-9.14900+1.39395I$	0
$u=-1.48243+0.25068I$ $a=-0.223696+0.544024I$ $b=\ \ 0.07169+1.80725I$	$-3.01562+7.11329I$	0
$u=-1.48243-0.25068I$ $a=-0.223696-0.544024I$ $b=\ \ 0.07169-1.80725I$	$-3.01562-7.11329I$	0
$u=-1.53749+0.15211I$ $a=\ \ 1.50614+0.01272I$ $b=\ \ 1.68160+0.13329I$	$-5.39490+4.53513I$	0
$u=-1.53749-0.15211I$ $a=\ \ 1.50614-0.01272I$ $b=\ \ 1.68160-0.13329I$	$-5.39490-4.53513I$	0
$u=\ \ 0.406916+0.168439I$ $a=-1.25472-5.36486I$ $b=\ \ 0.074077+0.800622I$	$3.77024-4.53103I$	$8.22458+6.69536I$
$u=\ \ 0.406916-0.168439I$ $a=-1.25472+5.36486I$ $b=\ \ 0.074077-0.800622I$	$3.77024+4.53103I$	$8.22458-6.69536I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.58071$ $a = -1.63264$ $b = -1.63455$	-8.81824	0
$u = 1.48930 + 0.55441I$ $a = -1.50676 + 0.66570I$ $b = -1.57377 - 0.77902I$	$-9.28034 - 8.26953I$	0
$u = 1.48930 - 0.55441I$ $a = -1.50676 - 0.66570I$ $b = -1.57377 + 0.77902I$	$-9.28034 + 8.26953I$	0
$u = -0.112871 + 0.355025I$ $a = 2.02427 - 0.38887I$ $b = -1.322340 + 0.325664I$	$-3.79837 + 4.86090I$	$-6.23298 - 3.29979I$
$u = -0.112871 - 0.355025I$ $a = 2.02427 + 0.38887I$ $b = -1.322340 - 0.325664I$	$-3.79837 - 4.86090I$	$-6.23298 + 3.29979I$
$u = 1.53961 + 0.56058I$ $a = 1.46289 - 0.60290I$ $b = 1.72297 + 0.74156I$	$-8.3594 - 16.0917I$	0
$u = 1.53961 - 0.56058I$ $a = 1.46289 + 0.60290I$ $b = 1.72297 - 0.74156I$	$-8.3594 + 16.0917I$	0
$u = -1.56552 + 0.57554I$ $a = -1.222210 - 0.542653I$ $b = -1.62521 + 0.02936I$	$-9.08401 + 5.81465I$	0
$u = -1.56552 - 0.57554I$ $a = -1.222210 + 0.542653I$ $b = -1.62521 - 0.02936I$	$-9.08401 - 5.81465I$	0
$u = -2.18540 + 0.57081I$ $a = 0.915634 + 0.234163I$ $b = 1.81648 - 0.11524I$	$-6.95721 + 0.21792I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-2.18540-0.57081I$		
$a=\quad 0.915634-0.234163I$	$-6.95721-0.21792I$	0
$b=\quad 1.81648+0.11524I$		

II. $I_2^u = \langle -191u^{19} - 54u^{18} + \cdots + 871b - 1760,\ -5462u^{19} + 3472u^{18} + \cdots + 871a - 3488,\ u^{20} - 10u^{18} + \cdots - 3u + 1 \rangle$

(i) Arc colorings

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

$$a_8 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 6.27095u^{19} - 3.98622u^{18} + \cdots - 32.5901u + 4.00459 \\ 0.219288u^{19} + 0.0619977u^{18} + \cdots - 1.65557u + 2.02067 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.299656u^{19} - 0.320321u^{18} + \cdots - 1.77956u + 5.89323 \\ 0.981630u^{19} + 1.08381u^{18} + \cdots - 0.756602u - 2.30540 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.85419u^{19} + 1.60276u^{18} + \cdots + 2.68197u - 11.7991 \\ -2.48680u^{19} - 0.278990u^{18} + \cdots + 3.45006u + 3.90700 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.950631u^{19} - 0.912744u^{18} + \cdots - 0.404133u + 5.69575 \\ 1.58553u^{19} + 0.453502u^{18} + \cdots - 3.25832u - 1.51550 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 2.22044u^{19} - 0.00574053u^{18} + \cdots - 10.9208u - 4.33525 \\ -0.576349u^{19} - 0.995408u^{18} + \cdots - 2.86338u + 3.66820 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -6.19518u^{19} + 0.515499u^{18} + \cdots + 22.0861u + 6.50517 \\ 1.36395u^{19} + 0.526980u^{18} + \cdots - 3.07233u - 3.82434 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 5.14122u^{19} - 2.33180u^{18} + \cdots - 27.6211u - 4.77727 \\ -1.31114u^{19} + 0.357061u^{18} + \cdots + 0.872560u + 4.45235 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 5.14122u^{19} - 2.33180u^{18} + \cdots - 27.6211u - 4.77727 \\ -1.31114u^{19} + 0.357061u^{18} + \cdots + 0.872560u + 4.45235 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -\frac{9575}{871}u^{19} + \frac{4001}{871}u^{18} + \cdots + \frac{38680}{871}u - \frac{118}{871}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{20} - u^{19} + \cdots - 2u + 1$
c_2	$u^{20} - 10u^{18} + \cdots - 3u + 1$
c_3	$u^{20} + 7u^{19} + \cdots - 4u - 1$
c_4	$u^{20} + 7u^{19} + \cdots + 7u + 1$
c_5	$u^{20} + u^{19} + \cdots + 2u + 1$
c_6	$u^{20} - u^{19} + \cdots + u + 1$
c_7	$u^{20} + 2u^{17} + \cdots - 11u - 1$
c_8	$u^{20} - 10u^{18} + \cdots + 3u + 1$
c_9	$u^{20} - u^{19} + \cdots - 2u - 1$
c_{10}	$u^{20} - u^{19} + \cdots + 5u^2 + 1$
c_{11}	$u^{20} - 11u^{19} + \cdots - u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_5	$y^{20} - 5y^{19} + \cdots + 14y + 1$
c_2, c_8	$y^{20} - 20y^{19} + \cdots - 23y + 1$
c_3	$y^{20} - 7y^{19} + \cdots + 14y + 1$
c_4	$y^{20} - 11y^{19} + \cdots - 3y + 1$
c_6	$y^{20} + 11y^{19} + \cdots - 9y + 1$
c_7	$y^{20} - 30y^{18} + \cdots - 15y + 1$
c_9	$y^{20} - 11y^{19} + \cdots + 6y + 1$
c_{10}	$y^{20} + 9y^{19} + \cdots + 10y + 1$
c_{11}	$y^{20} - 11y^{19} + \cdots - 39y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.975094 + 0.192027I$ $a = -0.228066 - 1.082830I$ $b = 0.20852 - 1.40893I$	$4.39215 - 0.76384I$	$-1.31293 + 11.96948I$
$u = 0.975094 - 0.192027I$ $a = -0.228066 + 1.082830I$ $b = 0.20852 + 1.40893I$	$4.39215 + 0.76384I$	$-1.31293 - 11.96948I$
$u = 0.931948 + 0.448978I$ $a = 0.042896 + 1.059970I$ $b = -1.237450 - 0.120382I$	$-4.41710 - 6.04390I$	$-11.7885 + 8.3222I$
$u = 0.931948 - 0.448978I$ $a = 0.042896 - 1.059970I$ $b = -1.237450 + 0.120382I$	$-4.41710 + 6.04390I$	$-11.7885 - 8.3222I$
$u = -0.728972 + 0.834999I$ $a = 0.53983 + 1.72031I$ $b = 0.251589 - 1.291110I$	$4.20835 + 3.34749I$	$10.38285 + 6.22702I$
$u = -0.728972 - 0.834999I$ $a = 0.53983 - 1.72031I$ $b = 0.251589 + 1.291110I$	$4.20835 - 3.34749I$	$10.38285 - 6.22702I$
$u = -0.781597 + 0.045766I$ $a = 0.17119 + 3.99242I$ $b = -0.107037 + 0.488805I$	$3.16335 + 4.45169I$	$-5.12268 - 4.32037I$
$u = -0.781597 - 0.045766I$ $a = 0.17119 - 3.99242I$ $b = -0.107037 - 0.488805I$	$3.16335 - 4.45169I$	$-5.12268 + 4.32037I$
$u = 1.092230 + 0.544737I$ $a = -0.291456 - 0.130127I$ $b = -0.003042 - 0.599513I$	$1.19434 - 6.17955I$	$7.14225 + 5.75160I$
$u = 1.092230 - 0.544737I$ $a = -0.291456 + 0.130127I$ $b = -0.003042 + 0.599513I$	$1.19434 + 6.17955I$	$7.14225 - 5.75160I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.582926 + 0.473640I$ $a = -0.413367 - 0.977453I$ $b = 0.418521 - 0.651644I$	$3.01685 + 1.94709I$	$2.17570 - 3.84431I$
$u = 0.582926 - 0.473640I$ $a = -0.413367 + 0.977453I$ $b = 0.418521 + 0.651644I$	$3.01685 - 1.94709I$	$2.17570 + 3.84431I$
$u = -0.487186 + 0.518657I$ $a = 1.120760 - 0.648579I$ $b = 0.917769 + 0.049096I$	$-1.79922 - 1.91581I$	$-10.61370 + 5.31696I$
$u = -0.487186 - 0.518657I$ $a = 1.120760 + 0.648579I$ $b = 0.917769 - 0.049096I$	$-1.79922 + 1.91581I$	$-10.61370 - 5.31696I$
$u = -1.45404 + 0.17577I$ $a = -1.65356 - 0.07969I$ $b = -1.62003 - 0.16216I$	$-5.99125 + 4.45821I$	$-9.91425 - 3.94197I$
$u = -1.45404 - 0.17577I$ $a = -1.65356 + 0.07969I$ $b = -1.62003 + 0.16216I$	$-5.99125 - 4.45821I$	$-9.91425 + 3.94197I$
$u = -1.45114 + 0.20138I$ $a = 0.108068 + 0.828850I$ $b = 0.100607 - 0.792711I$	$0.49537 + 4.42981I$	$-0.62033 - 12.45769I$
$u = -1.45114 - 0.20138I$ $a = 0.108068 - 0.828850I$ $b = 0.100607 + 0.792711I$	$0.49537 - 4.42981I$	$-0.62033 + 12.45769I$
$u = 0.270425$ $a = -2.72537$ $b = 1.29057$	-1.39500	7.03290
$u = 2.37105$ $a = 0.932793$ $b = 1.85053$	-7.13067	-24.6900

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{20}-u^{19}+\cdots-2u+1)(u^{61}+2u^{60}+\cdots-25u+1)$
c_2	$(u^{20}-10u^{18}+\cdots-3u+1)(u^{61}-u^{60}+\cdots+1440u-211)$
c_3	$(u^{20}+7u^{19}+\cdots-4u-1)(u^{61}-4u^{60}+\cdots-957u+121)$
c_4	$(u^{20}+7u^{19}+\cdots+7u+1)(u^{61}+6u^{60}+\cdots+22u+1)$
c_5	$(u^{20}+u^{19}+\cdots+2u+1)(u^{61}+2u^{60}+\cdots-25u+1)$
c_6	$(u^{20}-u^{19}+\cdots+u+1)(u^{61}+4u^{60}+\cdots+6790u-2531)$
c_7	$(u^{20}+2u^{17}+\cdots-11u-1)(u^{61}+u^{60}+\cdots-9850u-2333)$
c_8	$(u^{20}-10u^{18}+\cdots+3u+1)(u^{61}-u^{60}+\cdots+1440u-211)$
c_9	$(u^{20}-u^{19}+\cdots-2u-1)(u^{61}+2u^{60}+\cdots+529u+41)$
c_{10}	$(u^{20}-u^{19}+\cdots+5u^2+1)(u^{61}-10u^{59}+\cdots-62973u+14123)$
c_{11}	$(u^{20}-11u^{19}+\cdots-u-1)(u^{61}-4u^{60}+\cdots+6u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_5	$(y^{20} - 5y^{19} + \cdots + 14y + 1)(y^{61} - 54y^{60} + \cdots + 111y - 1)$
c_2, c_8	$(y^{20} - 20y^{19} + \cdots - 23y + 1)(y^{61} - 57y^{60} + \cdots + 631204y - 44521)$
c_3	$(y^{20} - 7y^{19} + \cdots + 14y + 1)(y^{61} - 28y^{60} + \cdots + 684255y - 14641)$
c_4	$(y^{20} - 11y^{19} + \cdots - 3y + 1)(y^{61} - 16y^{60} + \cdots + 364y - 1)$
c_6	$(y^{20} + 11y^{19} + \cdots - 9y + 1)$ $\cdot (y^{61} - 14y^{60} + \cdots + 234688910y - 6405961)$
c_7	$(y^{20} - 30y^{18} + \cdots - 15y + 1)$ $\cdot (y^{61} + 23y^{60} + \cdots + 27116488y - 5442889)$
c_9	$(y^{20} - 11y^{19} + \cdots + 6y + 1)(y^{61} + 52y^{59} + \cdots - 12653y - 1681)$
c_{10}	$(y^{20} + 9y^{19} + \cdots + 10y + 1)$ $\cdot (y^{61} - 20y^{60} + \cdots + 4161767199y - 199459129)$
c_{11}	$(y^{20} - 11y^{19} + \cdots - 39y + 1)(y^{61} - 8y^{60} + \cdots + 12y - 1)$