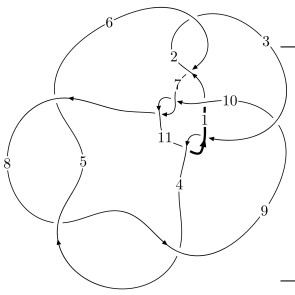
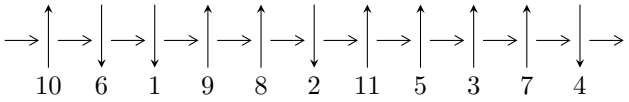
$11a_{331}$ $(K11a_{331})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 8.54894 \times 10^{95} u^{73} + 1.55407 \times 10^{96} u^{72} + \cdots + 2.00526 \times 10^{96} b - 1.27828 \times 10^{97}, \\ & - 2.74832 \times 10^{97} u^{73} - 4.48394 \times 10^{97} u^{72} + \cdots + 9.42470 \times 10^{97} a - 1.70641 \times 10^{99}, \\ & u^{74} + 3u^{73} + \cdots + 209u + 47 \rangle \\ I_2^u = \langle & u^{15} + 3u^{14} + \cdots + b + 2,\ -u^{15} - 2u^{14} + \cdots + a + 1,\ u^{17} + 2u^{16} + \cdots + 4u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 91 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. $\boldsymbol{I_1^u = \langle 8.55 \times 10^{95} u^{73} + 1.55 \times 10^{96} u^{72} + \cdots + 2.01 \times 10^{96} b - 1.28 \times 10^{97},\ -2.75 \times 10^{97} u^{73} - 4.48 \times 10^{97} u^{72} + \cdots + 9.42 \times 10^{97} a - 1.71 \times 10^{99},\ u^{74} + 3u^{73} + \cdots + 209u + 47 \rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} 0.291608u^{73} + 0.475764u^{72} + \cdots + 26.1433u + 18.1057 \\ -0.426327u^{73} - 0.774999u^{72} + \cdots + 28.8321u + 6.37465 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 0.571268u^{73} + 1.64222u^{72} + \cdots + 103.904u + 29.6284 \\ -0.233836u^{73} - 0.733389u^{72} + \cdots - 35.5006u - 10.6620 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0.160882u^{73} + 0.784015u^{72} + \cdots + 215.233u + 63.4002 \\ -0.0885971u^{73} - 1.07134u^{72} + \cdots - 178.043u - 55.1254 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u \\ u^3 + u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^2 + 1 \\ -u^4 - 2u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 0.756401u^{73} + 2.23671u^{72} + \cdots + 147.047u + 42.9701 \\ -0.261940u^{73} - 0.983478u^{72} + \cdots - 64.0355u - 19.0821 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -0.134719u^{73} - 0.299235u^{72} + \cdots + 54.9754u + 24.4804 \\ -0.426327u^{73} - 0.774999u^{72} + \cdots + 28.8321u + 6.37465 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.303078u^{73} + 0.404458u^{72} + \cdots - 35.9491u - 18.0658 \\ -0.240564u^{73} - 0.355060u^{72} + \cdots + 2.22918u - 2.45974 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.303078u^{73} + 0.404458u^{72} + \cdots - 35.9491u - 18.0658 \\ -0.240564u^{73} - 0.355060u^{72} + \cdots + 2.22918u - 2.45974 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -0.681636u^{73} - 3.18822u^{72} + \cdots - 172.342u - 53.5504$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{74}+3u^{73}+\cdots+59049u+17047$
c_2, c_6	$u^{74}+2u^{73}+\cdots-349u-241$
c_3, c_{11}	$u^{74}-4u^{73}+\cdots+578u-28$
c_4, c_5, c_8	$u^{74}+3u^{73}+\cdots+209u+47$
c_7, c_{10}	$u^{74}-29u^{72}+\cdots+4312u-2881$
c_9	$u^{74}-u^{73}+\cdots-2616u+589$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{74} - 33y^{73} + \cdots - 6606862717y + 290600209$
c_2, c_6	$y^{74} + 50y^{73} + \cdots - 32631y + 58081$
c_3, c_{11}	$y^{74} + 46y^{73} + \cdots - 79788y + 784$
c_4, c_5, c_8	$y^{74} + 69y^{73} + \cdots - 23847y + 2209$
c_7, c_{10}	$y^{74} - 58y^{73} + \cdots - 75786956y + 8300161$
c_9	$y^{74} - 9y^{73} + \cdots - 10759128y + 346921$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.729537 + 0.676863I$ $a = 0.868679 + 0.880701I$ $b = -0.163050 - 1.175520I$	$4.14808 - 0.48807I$	0
$u = 0.729537 - 0.676863I$ $a = 0.868679 - 0.880701I$ $b = -0.163050 + 1.175520I$	$4.14808 + 0.48807I$	0
$u = -0.977426 + 0.331531I$ $a = 0.19408 - 1.78945I$ $b = 0.495934 + 1.306620I$	$9.2153 - 11.1163I$	0
$u = -0.977426 - 0.331531I$ $a = 0.19408 + 1.78945I$ $b = 0.495934 - 1.306620I$	$9.2153 + 11.1163I$	0
$u = -0.943528 + 0.160031I$ $a = 0.306495 - 1.369660I$ $b = -0.498139 + 0.748835I$	$3.11842 + 2.09291I$	0
$u = -0.943528 - 0.160031I$ $a = 0.306495 + 1.369660I$ $b = -0.498139 - 0.748835I$	$3.11842 - 2.09291I$	0
$u = 0.906285 + 0.046309I$ $a = 0.37149 + 1.58844I$ $b = 0.058387 - 0.883000I$	$2.31155 + 0.31959I$	$6.67473 + 1.17791I$
$u = 0.906285 - 0.046309I$ $a = 0.37149 - 1.58844I$ $b = 0.058387 + 0.883000I$	$2.31155 - 0.31959I$	$6.67473 - 1.17791I$
$u = 0.795743 + 0.391782I$ $a = -0.33233 - 1.66140I$ $b = -0.446696 + 1.338070I$	$4.98505 + 5.49905I$	$7.28766 - 5.67795I$
$u = 0.795743 - 0.391782I$ $a = -0.33233 + 1.66140I$ $b = -0.446696 - 1.338070I$	$4.98505 - 5.49905I$	$7.28766 + 5.67795I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.040289+1.123610I$ $a=\ 1.53260-0.00979I$ $b=\ 0.755296-0.806599I$	$3.32334+3.24254I$	0
$u=-0.040289-1.123610I$ $a=\ 1.53260+0.00979I$ $b=\ 0.755296+0.806599I$	$3.32334-3.24254I$	0
$u=\ 0.639752+0.538004I$ $a=-0.48760-1.57150I$ $b=\ 0.366420+1.022380I$	$3.84856-1.30465I$	$7.86722+0.I$
$u=\ 0.639752-0.538004I$ $a=-0.48760+1.57150I$ $b=\ 0.366420-1.022380I$	$3.84856+1.30465I$	$7.86722+0.I$
$u=\ 0.000251+1.184520I$ $a=-1.98927-1.08115I$ $b=-0.096365+0.840334I$	$2.78997-3.49775I$	0
$u=\ 0.000251-1.184520I$ $a=-1.98927+1.08115I$ $b=-0.096365-0.840334I$	$2.78997+3.49775I$	0
$u=-0.159658+1.194760I$ $a=-0.089269+0.550066I$ $b=\ 0.29274-1.69325I$	$6.20327-3.01035I$	0
$u=-0.159658-1.194760I$ $a=-0.089269-0.550066I$ $b=\ 0.29274+1.69325I$	$6.20327+3.01035I$	0
$u=-0.546934+0.540048I$ $a=-0.27605-1.72599I$ $b=\ 0.276972+0.159839I$	$4.14609+2.20221I$	$4.65992+1.32874I$
$u=-0.546934-0.540048I$ $a=-0.27605+1.72599I$ $b=\ 0.276972-0.159839I$	$4.14609-2.20221I$	$4.65992-1.32874I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.107310+1.251050I$ $a=\ \ 0.06868-1.71275I$ $b=-0.03954+1.50942I$	$5.33288+0.16111I$	0
$u=-0.107310-1.251050I$ $a=\ \ 0.06868+1.71275I$ $b=-0.03954-1.50942I$	$5.33288-0.16111I$	0
$u=\ \ 0.643915+0.344718I$ $a=\ \ 0.68185+2.68762I$ $b=\ \ 0.339896-1.158020I$	$4.28355+5.31590I$	$8.32121-6.98455I$
$u=\ \ 0.643915-0.344718I$ $a=\ \ 0.68185-2.68762I$ $b=\ \ 0.339896+1.158020I$	$4.28355-5.31590I$	$8.32121+6.98455I$
$u=-0.672302+0.275487I$ $a=-0.463214+0.218192I$ $b=\ \ 0.994473+0.038479I$	$5.09446-5.88932I$	$7.14918+5.98042I$
$u=-0.672302-0.275487I$ $a=-0.463214-0.218192I$ $b=\ \ 0.994473-0.038479I$	$5.09446+5.88932I$	$7.14918-5.98042I$
$u=\ \ 0.534184+0.471782I$ $a=-0.203180+0.429819I$ $b=\ \ 0.568753+0.043415I$	$1.09531+1.83562I$	$2.55599-4.19616I$
$u=\ \ 0.534184-0.471782I$ $a=-0.203180-0.429819I$ $b=\ \ 0.568753-0.043415I$	$1.09531-1.83562I$	$2.55599+4.19616I$
$u=-0.781242+1.028170I$ $a=-0.589220+0.832021I$ $b=\ \ 0.342776-1.173760I$	$7.24129+5.12075I$	0
$u=-0.781242-1.028170I$ $a=-0.589220-0.832021I$ $b=\ \ 0.342776+1.173760I$	$7.24129-5.12075I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.162659 + 1.334780I$ $a = -0.513861 - 0.136702I$ $b = -1.40639 - 0.48404I$	$-4.07205 + 2.16735I$	0
$u = 0.162659 - 1.334780I$ $a = -0.513861 + 0.136702I$ $b = -1.40639 + 0.48404I$	$-4.07205 - 2.16735I$	0
$u = -0.077830 + 1.356390I$ $a = 0.719009 - 0.826751I$ $b = 0.343236 + 0.909674I$	$-2.84114 + 0.89469I$	0
$u = -0.077830 - 1.356390I$ $a = 0.719009 + 0.826751I$ $b = 0.343236 - 0.909674I$	$-2.84114 - 0.89469I$	0
$u = -0.173008 + 1.356910I$ $a = -1.01178 + 1.02451I$ $b = -0.593612 - 1.233660I$	$-3.89386 - 4.74590I$	0
$u = -0.173008 - 1.356910I$ $a = -1.01178 - 1.02451I$ $b = -0.593612 + 1.233660I$	$-3.89386 + 4.74590I$	0
$u = -0.605325 + 0.154014I$ $a = 0.73564 - 1.74796I$ $b = 0.50294 + 1.38892I$	$9.24632 + 0.28330I$	$12.69819 + 0.63805I$
$u = -0.605325 - 0.154014I$ $a = 0.73564 + 1.74796I$ $b = 0.50294 - 1.38892I$	$9.24632 - 0.28330I$	$12.69819 - 0.63805I$
$u = -0.243787 + 1.360410I$ $a = 1.128220 - 0.271966I$ $b = 0.755260 + 1.157050I$	$4.42124 - 2.83103I$	0
$u = -0.243787 - 1.360410I$ $a = 1.128220 + 0.271966I$ $b = 0.755260 - 1.157050I$	$4.42124 + 2.83103I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.327994 + 1.351610I$ $a = -0.439710 - 1.149670I$ $b = -0.290077 + 1.121430I$	$-2.02174 + 4.04028I$	0
$u = \quad 0.327994 - 1.351610I$ $a = -0.439710 + 1.149670I$ $b = -0.290077 - 1.121430I$	$-2.02174 - 4.04028I$	0
$u = -0.195271 + 1.386520I$ $a = -1.62301 - 0.11159I$ $b = -0.143149 - 1.028900I$	$3.52909 - 4.64112I$	0
$u = -0.195271 - 1.386520I$ $a = -1.62301 + 0.11159I$ $b = -0.143149 + 1.028900I$	$3.52909 + 4.64112I$	0
$u = -0.47948 + 1.33348I$ $a = -0.76428 + 1.24106I$ $b = -0.600996 - 0.993957I$	$-0.64736 - 7.35044I$	0
$u = -0.47948 - 1.33348I$ $a = -0.76428 - 1.24106I$ $b = -0.600996 + 0.993957I$	$-0.64736 + 7.35044I$	0
$u = -0.00514 + 1.42211I$ $a = -0.340891 + 0.208274I$ $b = -0.964892 + 0.318084I$	$-6.82153 + 0.92955I$	0
$u = -0.00514 - 1.42211I$ $a = -0.340891 - 0.208274I$ $b = -0.964892 - 0.318084I$	$-6.82153 - 0.92955I$	0
$u = -0.30682 + 1.39309I$ $a = \quad 0.0331436 - 0.1004190I$ $b = -0.778543 + 0.548393I$	$-1.97320 - 2.18673I$	0
$u = -0.30682 - 1.39309I$ $a = \quad 0.0331436 + 0.1004190I$ $b = -0.778543 - 0.548393I$	$-1.97320 + 2.18673I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.26985+1.40575I$ $a=\ 0.280548-0.298110I$ $b=\ 1.265840-0.184891I$	$-0.26002-9.34220I$	0
$u=-0.26985-1.40575I$ $a=\ 0.280548+0.298110I$ $b=\ 1.265840+0.184891I$	$-0.26002+9.34220I$	0
$u=\ 0.25598+1.42903I$ $a=\ 1.10171+1.29179I$ $b=\ 0.429957-1.299690I$	$-1.37538+8.63536I$	0
$u=\ 0.25598-1.42903I$ $a=\ 1.10171-1.29179I$ $b=\ 0.429957+1.299690I$	$-1.37538-8.63536I$	0
$u=\ 0.09320+1.45012I$ $a=\ 0.367361-0.401509I$ $b=\ 0.570488+0.736664I$	$-3.23957+0.97155I$	0
$u=\ 0.09320-1.45012I$ $a=\ 0.367361+0.401509I$ $b=\ 0.570488-0.736664I$	$-3.23957-0.97155I$	0
$u=\ 0.33909+1.42618I$ $a=\ 0.897474+0.790587I$ $b=\ 0.412854-0.931526I$	$-2.65219+4.84548I$	0
$u=\ 0.33909-1.42618I$ $a=\ 0.897474-0.790587I$ $b=\ 0.412854+0.931526I$	$-2.65219-4.84548I$	0
$u=\ 0.14497+1.48045I$ $a=\ 0.308110+0.341335I$ $b=\ 0.732906+0.027438I$	$-5.30403+4.22277I$	0
$u=\ 0.14497-1.48045I$ $a=\ 0.308110-0.341335I$ $b=\ 0.732906-0.027438I$	$-5.30403-4.22277I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.480633+0.177328I$ $a=-2.91872+1.85536I$ $b=-0.012937-1.270620I$	$8.59018-2.10885I$	$14.2741+3.7354I$
$u=-0.480633-0.177328I$ $a=-2.91872-1.85536I$ $b=-0.012937+1.270620I$	$8.59018+2.10885I$	$14.2741-3.7354I$
$u=\ \ 0.31043+1.46205I$ $a=-0.917093-0.764806I$ $b=-0.70775+1.34146I$	$-0.93880+9.51927I$	0
$u=\ \ 0.31043-1.46205I$ $a=-0.917093+0.764806I$ $b=-0.70775-1.34146I$	$-0.93880-9.51927I$	0
$u=-0.38759+1.47330I$ $a=\ \ 0.98510-1.03601I$ $b=\ \ 0.64917+1.35397I$	$3.4628-16.0068I$	0
$u=-0.38759-1.47330I$ $a=\ \ 0.98510+1.03601I$ $b=\ \ 0.64917-1.35397I$	$3.4628+16.0068I$	0
$u=-0.463049+0.111626I$ $a=\ \ 0.09477+2.83159I$ $b=-0.354673-1.019580I$	$0.80708-2.42495I$	$0.09499+4.46298I$
$u=-0.463049-0.111626I$ $a=\ \ 0.09477-2.83159I$ $b=-0.354673+1.019580I$	$0.80708+2.42495I$	$0.09499-4.46298I$
$u=\ \ 0.437958$ $a=\ \ 0.177670$ $b=-1.22248$	0.260961	17.7580
$u=-0.024389+0.433644I$ $a=\ \ 0.483657+0.315936I$ $b=-0.542238+0.411060I$	$-0.93889+1.06996I$	$-3.82834-4.75783I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.024389-0.433644I$ $a=\ 0.483657-0.315936I$ $b=-0.542238-0.411060I$	$-0.93889-1.06996I$	$-3.82834+4.75783I$
$u=\ 0.413553$ $a=\ 1.39372$ $b=\ 0.0976025$	1.01618	11.7030
$u=\ 0.13112+1.67227I$ $a=\ 0.249215+0.136146I$ $b=\ 0.047190-0.821814I$	$-4.10246+2.99543I$	0
$u=\ 0.13112-1.67227I$ $a=\ 0.249215-0.136146I$ $b=\ 0.047190+0.821814I$	$-4.10246-2.99543I$	0

II.

$\boldsymbol{I_2^u = \langle u^{15}+3u^{14}+\cdots+b+2,\ -u^{15}-2u^{14}+\cdots+a+1,\ u^{17}+2u^{16}+\cdots+4u+1\rangle}$

(i) Arc colorings

$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} u^{15}+2u^{14}+\cdots+2u-1 \\ -u^{15}-3u^{14}+\cdots-6u-2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -2u^{16}-4u^{15}+\cdots-12u^2-u \\ 2u^{15}+3u^{14}+\cdots+6u+1 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^{16}-3u^{15}+\cdots-7u^2-u \\ 3u^{15}+6u^{14}+\cdots+14u+3 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u \\ u^3+u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u^2+1 \\ -u^4-2u^2 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -2u^{16}-3u^{15}+\cdots-10u^2+3u \\ u^{15}+u^{14}+\cdots+6u+1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -u^{14}-2u^{13}+\cdots-4u-3 \\ -u^{15}-3u^{14}+\cdots-6u-2 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^{16}+3u^{15}+\cdots+8u+4 \\ u^{16}+u^{15}+\cdots+4u+1 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} u^{16}+3u^{15}+\cdots+8u+4 \\ u^{16}+u^{15}+\cdots+4u+1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -u^{16}+u^{15}-9u^{14}+3u^{13}-38u^{12}-17u^{11}-90u^{10}-94u^9-121u^8-168u^7-101u^6-123u^5-74u^4-22u^3-43u^2+4u$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{17} - 6u^{16} + \cdots + 6u - 1$
c_2	$u^{17} + u^{16} + \cdots - 5u^2 - 1$
c_3	$u^{17} + 3u^{16} + \cdots + 3u + 1$
c_4, c_5	$u^{17} + 2u^{16} + \cdots + 4u + 1$
c_6	$u^{17} - u^{16} + \cdots + 5u^2 + 1$
c_7	$u^{17} - 3u^{16} + \cdots - u + 1$
c_8	$u^{17} - 2u^{16} + \cdots + 4u - 1$
c_9	$u^{17} - 8u^{14} + \cdots + 9u + 1$
c_{10}	$u^{17} + 3u^{16} + \cdots - u - 1$
c_{11}	$u^{17} - 3u^{16} + \cdots + 3u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{17} - 4y^{16} + \cdots + 12y - 1$
c_2, c_6	$y^{17} + 11y^{16} + \cdots - 10y - 1$
c_3, c_{11}	$y^{17} + 11y^{16} + \cdots - 11y - 1$
c_4, c_5, c_8	$y^{17} + 18y^{16} + \cdots + 6y - 1$
c_7, c_{10}	$y^{17} - 17y^{16} + \cdots + 15y - 1$
c_9	$y^{17} - 12y^{14} + \cdots + 55y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.917169+0.197212I$ $a=\ 0.33537-1.51249I$ $b=-0.325330+0.891594I$	$1.91049+1.40877I$	$1.99755-3.08552I$
$u=-0.917169-0.197212I$ $a=\ 0.33537+1.51249I$ $b=-0.325330-0.891594I$	$1.91049-1.40877I$	$1.99755+3.08552I$
$u=\ 0.035271+1.235610I$ $a=\ 0.70102-1.33099I$ $b=\ 0.19425+1.50294I$	$5.20161+1.70001I$	$5.37273-2.73061I$
$u=\ 0.035271-1.235610I$ $a=\ 0.70102+1.33099I$ $b=\ 0.19425-1.50294I$	$5.20161-1.70001I$	$5.37273+2.73061I$
$u=\ 0.171164+1.296500I$ $a=\ 1.75533-0.00516I$ $b=\ 0.459524-0.755278I$	$2.00726+4.91579I$	$2.45525-6.27876I$
$u=\ 0.171164-1.296500I$ $a=\ 1.75533+0.00516I$ $b=\ 0.459524+0.755278I$	$2.00726-4.91579I$	$2.45525+6.27876I$
$u=\ 0.409969+0.519303I$ $a=-1.08154-2.81632I$ $b=\ 0.226258+0.744134I$	$4.98146-2.80089I$	$12.23664+2.91381I$
$u=\ 0.409969-0.519303I$ $a=-1.08154+2.81632I$ $b=\ 0.226258-0.744134I$	$4.98146+2.80089I$	$12.23664-2.91381I$
$u=\ 0.089248+0.610949I$ $a=-0.658805-0.382206I$ $b=\ 0.101471-1.352370I$	$7.59288-1.25507I$	$8.41084+0.24395I$
$u=\ 0.089248-0.610949I$ $a=-0.658805+0.382206I$ $b=\ 0.101471+1.352370I$	$7.59288+1.25507I$	$8.41084-0.24395I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.124683+1.379790I$ $a=-0.427475-0.148819I$ $b=-1.044610+0.361468I$	$-4.85490-1.43958I$	$-1.090547-0.048277I$
$u=-0.124683-1.379790I$ $a=-0.427475+0.148819I$ $b=-1.044610-0.361468I$	$-4.85490+1.43958I$	$-1.090547+0.048277I$
$u=-0.36245+1.38049I$ $a=-0.841748+1.085670I$ $b=-0.467784-1.122320I$	$-2.18873-6.08260I$	$3.68269+6.06370I$
$u=-0.36245-1.38049I$ $a=-0.841748-1.085670I$ $b=-0.467784+1.122320I$	$-2.18873+6.08260I$	$3.68269-6.06370I$
$u=-0.17262+1.59957I$ $a=\ \ 0.019317-0.357002I$ $b=-0.175891+0.545807I$	$-4.71707-2.60778I$	$-2.21051-0.39909I$
$u=-0.17262-1.59957I$ $a=\ \ 0.019317+0.357002I$ $b=-0.175891-0.545807I$	$-4.71707+2.60778I$	$-2.21051+0.39909I$
$u=-0.257452$ $a=-1.60294$ $b=-0.935779$	-0.126778	-3.70930

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{17}-6u^{16}+\cdots+6u-1)(u^{74}+3u^{73}+\cdots+59049u+17047)$
c_2	$(u^{17}+u^{16}+\cdots-5u^2-1)(u^{74}+2u^{73}+\cdots-349u-241)$
c_3	$(u^{17}+3u^{16}+\cdots+3u+1)(u^{74}-4u^{73}+\cdots+578u-28)$
c_4, c_5	$(u^{17}+2u^{16}+\cdots+4u+1)(u^{74}+3u^{73}+\cdots+209u+47)$
c_6	$(u^{17}-u^{16}+\cdots+5u^2+1)(u^{74}+2u^{73}+\cdots-349u-241)$
c_7	$(u^{17}-3u^{16}+\cdots-u+1)(u^{74}-29u^{72}+\cdots+4312u-2881)$
c_8	$(u^{17}-2u^{16}+\cdots+4u-1)(u^{74}+3u^{73}+\cdots+209u+47)$
c_9	$(u^{17}-8u^{14}+\cdots+9u+1)(u^{74}-u^{73}+\cdots-2616u+589)$
c_{10}	$(u^{17}+3u^{16}+\cdots-u-1)(u^{74}-29u^{72}+\cdots+4312u-2881)$
c_{11}	$(u^{17}-3u^{16}+\cdots+3u-1)(u^{74}-4u^{73}+\cdots+578u-28)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{17} - 4y^{16} + \cdots + 12y - 1)$ $\cdot (y^{74} - 33y^{73} + \cdots - 6606862717y + 290600209)$
c_2, c_6	$(y^{17} + 11y^{16} + \cdots - 10y - 1)(y^{74} + 50y^{73} + \cdots - 32631y + 58081)$
c_3, c_{11}	$(y^{17} + 11y^{16} + \cdots - 11y - 1)(y^{74} + 46y^{73} + \cdots - 79788y + 784)$
c_4, c_5, c_8	$(y^{17} + 18y^{16} + \cdots + 6y - 1)(y^{74} + 69y^{73} + \cdots - 23847y + 2209)$
c_7, c_{10}	$(y^{17} - 17y^{16} + \cdots + 15y - 1)$ $\cdot (y^{74} - 58y^{73} + \cdots - 75786956y + 8300161)$
c_9	$(y^{17} - 12y^{14} + \cdots + 55y - 1)$ $\cdot (y^{74} - 9y^{73} + \cdots - 10759128y + 346921)$