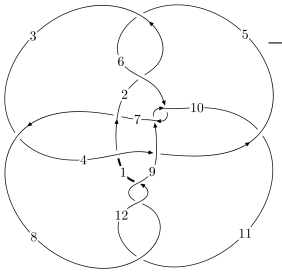
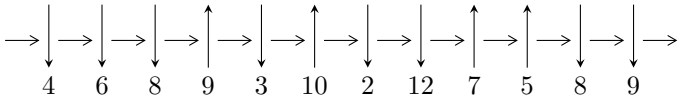
$12n_{0755}$ $(K12n_{0755})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

$$\underset{c_{12}}{9,12} \to \underset{c_4}{1,5} \to \underset{c_1}{4} \to \underset{c_8}{2} \to \underset{c_3}{8} \to \underset{c_7}{3} \to \underset{c_{11}}{7} \to \underset{c_{10}}{11} \to \underset{c_6}{10} \to 6 \longrightarrow\!\!\!\!\rightarrow c_2, c_5, c_9$$

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

$$\begin{aligned} I_1^u = \langle & 1.18568 \times 10^{223} u^{81} + 7.43164 \times 10^{223} u^{80} + \cdots + 3.23988 \times 10^{222} b + 4.31116 \times 10^{223}, \\ & - 1.92883 \times 10^{223} u^{81} - 1.27832 \times 10^{224} u^{80} + \cdots + 3.23988 \times 10^{222} a - 1.11257 \times 10^{224}, \\ & u^{82} + 6u^{81} + \cdots - 11u - 3 \rangle \\ I_2^u = \langle & -1890866592561 u^{22} + 2410031480209 u^{21} + \cdots + 3200805062239 b + 12377780689946, \\ & - 7028112561663 u^{22} + 3451841046935 u^{21} + \cdots + 3200805062239 a + 16799928060287, \\ & u^{23} - u^{22} + \cdots - 3u + 1 \rangle \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 105 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. $\boldsymbol{I_1^u = \langle 1.19 \times 10^{223} u^{81} + 7.43 \times 10^{223} u^{80} + \cdots + 3.24 \times 10^{222} b + 4.31 \times 10^{223},\ -1.93 \times 10^{223} u^{81} - 1.28 \times 10^{224} u^{80} + \cdots + 3.24 \times 10^{222} a - 1.11 \times 10^{224},\ u^{82} + 6u^{81} + \cdots - 11u - 3 \rangle}$

(i) Arc colorings

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

$$a_{12} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 5.95340u^{81} + 39.4558u^{80} + \cdots + 211.539u + 34.3399 \\ -3.65962u^{81} - 22.9380u^{80} + \cdots - 108.880u - 13.3065 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 5.95340u^{81} + 39.4558u^{80} + \cdots + 211.539u + 34.3399 \\ -2.25036u^{81} - 13.4360u^{80} + \cdots - 49.9298u - 2.10025 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2.45651u^{81} + 13.4972u^{80} + \cdots + 8.18878u - 15.0013 \\ 3.58310u^{81} + 22.9490u^{80} + \cdots + 93.7957u + 10.9838 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 4.36051u^{81} + 28.9039u^{80} + \cdots + 146.566u + 23.3322 \\ -3.84325u^{81} - 23.9879u^{80} + \cdots - 114.903u - 13.1080 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 0.731709u^{81} + 7.25277u^{80} + \cdots + 134.322u + 45.5660 \\ -3.38808u^{81} - 21.7865u^{80} + \cdots - 116.411u - 20.2879 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} 1.23820u^{81} + 5.64993u^{80} + \cdots - 58.9501u - 27.1169 \\ 2.72175u^{81} + 17.1903u^{80} + \cdots + 62.3171u + 5.29688 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1.96680u^{81} + 15.0496u^{80} + \cdots + 138.404u + 35.1527 \\ -4.97606u^{81} - 31.6255u^{80} + \cdots - 132.203u - 16.3332 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -4.04743u^{81} - 27.0123u^{80} + \cdots - 215.823u - 51.0412$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{82} - 4u^{81} + \cdots - 14492u + 15032$
c_2, c_5	$u^{82} - 2u^{81} + \cdots + 386u - 21$
c_3	$u^{82} - 2u^{81} + \cdots - 9468926u - 944291$
c_4	$u^{82} + u^{81} + \cdots + 12069u + 3617$
c_6, c_9	$u^{82} + u^{81} + \cdots + 403u + 61$
c_7	$u^{82} + 2u^{81} + \cdots + 28u - 151$
c_8, c_{11}, c_{12}	$u^{82} + 6u^{81} + \cdots - 11u - 3$
c_{10}	$u^{82} - u^{81} + \cdots - 2699225u + 632501$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{82} + 70y^{81} + \cdots + 3143561008y + 225961024$
c_2, c_5	$y^{82} + 52y^{81} + \cdots - 12412y + 441$
c_3	$y^{82} + 48y^{81} + \cdots - 10989606497604y + 891685492681$
c_4	$y^{82} - 71y^{81} + \cdots - 240578075y + 13082689$
c_6, c_9	$y^{82} + 47y^{81} + \cdots + 37305y + 3721$
c_7	$y^{82} + 4y^{81} + \cdots - 246310y + 22801$
c_8, c_{11}, c_{12}	$y^{82} - 18y^{81} + \cdots - 397y + 9$
c_{10}	$y^{82} - 45y^{81} + \cdots - 21983555058121y + 400057515001$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.806236+0.447979I$ $a=\ \ 0.116844+0.907734I$ $b=\ \ 0.313050+0.872682I$	$-0.042747+1.373590I$	0
$u=-0.806236-0.447979I$ $a=\ \ 0.116844-0.907734I$ $b=\ \ 0.313050-0.872682I$	$-0.042747-1.373590I$	0
$u=\ \ 0.835911+0.366396I$ $a=-0.895782-0.543357I$ $b=\ \ 0.686491+0.523534I$	$1.47647-3.78347I$	0
$u=\ \ 0.835911-0.366396I$ $a=-0.895782+0.543357I$ $b=\ \ 0.686491-0.523534I$	$1.47647+3.78347I$	0
$u=-0.701050+0.577627I$ $a=-0.094098+0.689287I$ $b=\ \ 0.443176+0.530379I$	$-0.048198+1.306660I$	0
$u=-0.701050-0.577627I$ $a=-0.094098-0.689287I$ $b=\ \ 0.443176-0.530379I$	$-0.048198-1.306660I$	0
$u=-0.874548+0.018157I$ $a=-1.53808+0.49342I$ $b=\ \ 1.016920-0.505156I$	$-1.58786+5.67587I$	$-9.37818-5.48357I$
$u=-0.874548-0.018157I$ $a=-1.53808-0.49342I$ $b=\ \ 1.016920+0.505156I$	$-1.58786-5.67587I$	$-9.37818+5.48357I$
$u=-1.15383$ $a=-0.365134$ $b=-0.413477$	-2.52087	0
$u=-0.750355+0.898180I$ $a=-0.25763-1.49046I$ $b=\ \ 0.73558-1.48679I$	$7.24531+4.47737I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.750355-0.898180I$ $a=-0.25763+1.49046I$ $b=\ \ 0.73558+1.48679I$	$7.24531-4.47737I$	0
$u=-0.425248+1.099560I$ $a=\ \ 0.45745+1.56142I$ $b=-0.381257+0.936714I$	$3.38750+5.56328I$	0
$u=-0.425248-1.099560I$ $a=\ \ 0.45745-1.56142I$ $b=-0.381257-0.936714I$	$3.38750-5.56328I$	0
$u=-0.821348+0.914226I$ $a=-0.931141-0.836821I$ $b=-0.24212-1.51037I$	$2.05800-4.23861I$	0
$u=-0.821348-0.914226I$ $a=-0.931141+0.836821I$ $b=-0.24212+1.51037I$	$2.05800+4.23861I$	0
$u=\ \ 0.822864+0.959472I$ $a=-0.58005+1.29619I$ $b=\ \ 0.60803+1.79418I$	$7.49350-0.72833I$	0
$u=\ \ 0.822864-0.959472I$ $a=-0.58005-1.29619I$ $b=\ \ 0.60803-1.79418I$	$7.49350+0.72833I$	0
$u=-0.673993+0.279521I$ $a=-0.540764+0.727882I$ $b=-1.64438+0.06585I$	$-3.58880+2.02013I$	$-13.3165-8.2924I$
$u=-0.673993-0.279521I$ $a=-0.540764-0.727882I$ $b=-1.64438-0.06585I$	$-3.58880-2.02013I$	$-13.3165+8.2924I$
$u=\ \ 0.883514+0.916466I$ $a=-0.822379+0.907210I$ $b=\ \ 0.16986+1.49068I$	$4.92220-0.58301I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.883514 - 0.916466I$ $a = -0.822379 - 0.907210I$ $b = 0.16986 - 1.49068I$	$4.92220 + 0.58301I$	0
$u = -0.631826 + 0.348866I$ $a = 0.61391 + 2.12275I$ $b = -1.108410 + 0.201294I$	$-3.40457 + 0.57973I$	$-9.43437 - 4.19864I$
$u = -0.631826 - 0.348866I$ $a = 0.61391 - 2.12275I$ $b = -1.108410 - 0.201294I$	$-3.40457 - 0.57973I$	$-9.43437 + 4.19864I$
$u = 0.712432 + 0.084214I$ $a = 0.58489 - 1.49460I$ $b = 0.40860 - 1.43638I$	$-1.50757 - 6.70450I$	$-11.21324 + 6.26401I$
$u = 0.712432 - 0.084214I$ $a = 0.58489 + 1.49460I$ $b = 0.40860 + 1.43638I$	$-1.50757 + 6.70450I$	$-11.21324 - 6.26401I$
$u = -0.450661 + 0.549059I$ $a = 0.283735 - 0.371733I$ $b = 1.99582 + 0.12483I$	$0.42096 + 8.02120I$	$-2.11051 - 11.91858I$
$u = -0.450661 - 0.549059I$ $a = 0.283735 + 0.371733I$ $b = 1.99582 - 0.12483I$	$0.42096 - 8.02120I$	$-2.11051 + 11.91858I$
$u = -0.974900 + 0.848966I$ $a = -0.773538 - 0.899541I$ $b = 0.564453 - 1.073860I$	$0.47523 + 4.56353I$	0
$u = -0.974900 - 0.848966I$ $a = -0.773538 + 0.899541I$ $b = 0.564453 + 1.073860I$	$0.47523 - 4.56353I$	0
$u = -0.950851 + 0.883034I$ $a = 0.330778 + 0.966106I$ $b = -0.132030 + 1.199490I$	$0.53361 + 1.91658I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.950851-0.883034I$ $a=\ \ 0.330778-0.966106I$ $b=-0.132030-1.199490I$	$0.53361-1.91658I$	0
$u=-0.065661+0.689575I$ $a=\ \ 0.188975-0.904470I$ $b=-0.618127+0.219610I$	$0.90992+2.47162I$	$-2.89492-3.06151I$
$u=-0.065661-0.689575I$ $a=\ \ 0.188975+0.904470I$ $b=-0.618127-0.219610I$	$0.90992-2.47162I$	$-2.89492+3.06151I$
$u=-0.582300+1.190720I$ $a=-0.159473-0.797913I$ $b=\ \ 0.03486-1.72869I$	$6.45996+1.18643I$	0
$u=-0.582300-1.190720I$ $a=-0.159473+0.797913I$ $b=\ \ 0.03486+1.72869I$	$6.45996-1.18643I$	0
$u=-1.098680+0.754147I$ $a=\ \ 1.002280+0.473388I$ $b=\ \ 0.219617+1.329070I$	$6.12437+1.73968I$	0
$u=-1.098680-0.754147I$ $a=\ \ 1.002280-0.473388I$ $b=\ \ 0.219617-1.329070I$	$6.12437-1.73968I$	0
$u=-0.260067+0.609056I$ $a=\ \ 1.90359-0.34249I$ $b=-0.049741-0.351548I$	$3.81108+2.73141I$	$4.36589-2.14562I$
$u=-0.260067-0.609056I$ $a=\ \ 1.90359+0.34249I$ $b=-0.049741+0.351548I$	$3.81108-2.73141I$	$4.36589+2.14562I$
$u=-1.018490+0.869250I$ $a=\ \ 0.60257+1.28317I$ $b=-0.78229+1.66142I$	$1.48594+10.83750I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.018490-0.869250I$ $a=\ \ 0.60257-1.28317I$ $b=-0.78229-1.66142I$	$1.48594-10.83750I$	0
$u=\ \ 1.005000+0.889070I$ $a=\ \ 0.603105-1.085290I$ $b=-0.46354-1.66659I$	$4.55738-6.10859I$	0
$u=\ \ 1.005000-0.889070I$ $a=\ \ 0.603105+1.085290I$ $b=-0.46354+1.66659I$	$4.55738+6.10859I$	0
$u=\ \ 0.520783+0.400279I$ $a=-0.419662+0.443731I$ $b=\ \ 1.48234+0.41015I$	$2.58165-3.80058I$	$2.24184+7.84876I$
$u=\ \ 0.520783-0.400279I$ $a=-0.419662-0.443731I$ $b=\ \ 1.48234-0.41015I$	$2.58165+3.80058I$	$2.24184-7.84876I$
$u=\ \ 0.626125+0.145468I$ $a=-0.18087-2.79944I$ $b=-0.587182+0.101724I$	$-4.14051-1.50707I$	$-13.3689+5.4539I$
$u=\ \ 0.626125-0.145468I$ $a=-0.18087+2.79944I$ $b=-0.587182-0.101724I$	$-4.14051+1.50707I$	$-13.3689-5.4539I$
$u=\ \ 1.063340+0.849536I$ $a=\ \ 0.956780-0.757979I$ $b=-0.03841-1.76406I$	$6.72056-5.96162I$	0
$u=\ \ 1.063340-0.849536I$ $a=\ \ 0.956780+0.757979I$ $b=-0.03841+1.76406I$	$6.72056+5.96162I$	0
$u=\ \ 0.476810+0.402159I$ $a=\ \ 2.10026+2.83473I$ $b=\ \ 0.284676+0.060377I$	$-0.29800-7.98807I$	$-3.3717+15.3963I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.476810 - 0.402159I$ $a = 2.10026 - 2.83473I$ $b = 0.284676 - 0.060377I$	$-0.29800 + 7.98807I$	$-3.3717 - 15.3963I$
$u = -0.387572 + 0.483892I$ $a = -0.506786 + 0.595374I$ $b = 0.161400 + 0.343252I$	$-0.209152 + 1.137760I$	$-2.77451 - 5.70461I$
$u = -0.387572 - 0.483892I$ $a = -0.506786 - 0.595374I$ $b = 0.161400 - 0.343252I$	$-0.209152 - 1.137760I$	$-2.77451 + 5.70461I$
$u = 0.557426 + 0.231728I$ $a = -0.33867 - 1.76399I$ $b = -1.10016 - 1.23923I$	$-3.82873 - 0.00668I$	$-16.1459 + 7.0292I$
$u = 0.557426 - 0.231728I$ $a = -0.33867 + 1.76399I$ $b = -1.10016 + 1.23923I$	$-3.82873 + 0.00668I$	$-16.1459 - 7.0292I$
$u = 1.409430 + 0.115816I$ $a = -0.164334 + 0.187390I$ $b = -0.135012 - 0.469782I$	$-6.54986 - 3.23861I$	0
$u = 1.409430 - 0.115816I$ $a = -0.164334 - 0.187390I$ $b = -0.135012 + 0.469782I$	$-6.54986 + 3.23861I$	0
$u = 0.84939 + 1.16040I$ $a = 0.631650 - 0.921823I$ $b = 0.03685 - 1.45118I$	$9.67520 + 3.07500I$	0
$u = 0.84939 - 1.16040I$ $a = 0.631650 + 0.921823I$ $b = 0.03685 + 1.45118I$	$9.67520 - 3.07500I$	0
$u = -0.98461 + 1.06132I$ $a = -0.518913 - 1.125470I$ $b = 0.359482 - 1.003890I$	$0.93021 + 4.88868I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.98461-1.06132I$ $a=-0.518913+1.125470I$ $b=\ \ 0.359482+1.003890I$	$0.93021-4.88868I$	0
$u=-0.86125+1.16514I$ $a=\ \ 0.705142+0.791235I$ $b=\ \ 0.19060+1.59932I$	$6.48875-9.64645I$	0
$u=-0.86125-1.16514I$ $a=\ \ 0.705142-0.791235I$ $b=\ \ 0.19060-1.59932I$	$6.48875+9.64645I$	0
$u=\ \ 0.82211+1.22177I$ $a=-0.397179+0.816867I$ $b=\ \ 0.40067+1.95196I$	$6.25873-3.82475I$	0
$u=\ \ 0.82211-1.22177I$ $a=-0.397179-0.816867I$ $b=\ \ 0.40067-1.95196I$	$6.25873+3.82475I$	0
$u=\ \ 0.510704+0.080688I$ $a=-1.91916+0.40206I$ $b=\ \ 0.714917+0.882843I$	$2.50196-2.66858I$	$-1.26207+3.93369I$
$u=\ \ 0.510704-0.080688I$ $a=-1.91916-0.40206I$ $b=\ \ 0.714917-0.882843I$	$2.50196+2.66858I$	$-1.26207-3.93369I$
$u=-1.13264+0.96131I$ $a=-0.573896-1.114140I$ $b=\ \ 0.77313-1.68807I$	$5.5638+17.2835I$	0
$u=-1.13264-0.96131I$ $a=-0.573896+1.114140I$ $b=\ \ 0.77313+1.68807I$	$5.5638-17.2835I$	0
$u=\ \ 1.13751+0.96101I$ $a=-0.573662+1.059270I$ $b=\ \ 0.54430+1.58374I$	$8.71424-10.69960I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.13751 - 0.96101I$ $a = -0.573662 - 1.059270I$ $b = 0.54430 - 1.58374I$	$8.71424 + 10.69960I$	0
$u = -1.48390 + 0.24377I$ $a = -0.031323 - 0.358276I$ $b = -0.235266 - 0.710195I$	$-1.098920 + 0.366529I$	0
$u = -1.48390 - 0.24377I$ $a = -0.031323 + 0.358276I$ $b = -0.235266 + 0.710195I$	$-1.098920 - 0.366529I$	0
$u = 0.492926$ $a = 1.00800$ $b = -1.10716$	-1.69272	-3.43940
$u = 1.11375 + 1.03431I$ $a = 0.577088 - 0.734092I$ $b = -0.56145 - 1.82423I$	$5.35450 - 4.18150I$	0
$u = 1.11375 - 1.03431I$ $a = 0.577088 + 0.734092I$ $b = -0.56145 + 1.82423I$	$5.35450 + 4.18150I$	0
$u = 1.54442 + 0.24643I$ $a = 0.217680 + 0.007983I$ $b = -0.345847 + 0.430990I$	$-4.74804 - 6.73053I$	0
$u = 1.54442 - 0.24643I$ $a = 0.217680 - 0.007983I$ $b = -0.345847 - 0.430990I$	$-4.74804 + 6.73053I$	0
$u = -1.28649 + 0.97876I$ $a = 0.566181 + 0.565715I$ $b = -0.75720 + 1.37954I$	$4.36428 + 6.64097I$	0
$u = -1.28649 - 0.97876I$ $a = 0.566181 - 0.565715I$ $b = -0.75720 - 1.37954I$	$4.36428 - 6.64097I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.338398+0.065785I$		
$a=-3.21361+0.05803I$	$0.77876+2.17059I$	$-3.05306-2.50525I$
$b=-0.202094+0.875685I$		
$u=-0.338398-0.065785I$		
$a=-3.21361-0.05803I$	$0.77876-2.17059I$	$-3.05306+2.50525I$
$b=-0.202094-0.875685I$		

II.

$\boldsymbol{I_2^u = \langle -1.89\times10^{12}u^{22}+2.41\times10^{12}u^{21}+\cdots+3.20\times10^{12}b+1.24\times10^{13},\ -7.03\times10^{12}u^{22}+3.45\times10^{12}u^{21}+\cdots+3.20\times10^{12}a+1.68\times10^{13},\ u^{23}-u^{22}+\cdots-3u+1\rangle}$

(i) Arc colorings

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

$$a_{12} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 2.19573u^{22} - 1.07843u^{21} + \cdots + 7.61282u - 5.24866 \\ 0.590747u^{22} - 0.752945u^{21} + \cdots + 2.18120u - 3.86708 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 2.19573u^{22} - 1.07843u^{21} + \cdots + 7.61282u - 5.24866 \\ 0.977901u^{22} - 0.852039u^{21} + \cdots + 3.33738u - 4.98439 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -4.02910u^{22} + 1.11016u^{21} + \cdots - 18.5602u + 6.75980 \\ -3.12743u^{22} + 1.87545u^{21} + \cdots - 8.95195u + 6.59751 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} 1.84688u^{22} - 1.23642u^{21} + \cdots + 5.85633u - 4.25721 \\ 0.629049u^{22} - 1.01003u^{21} + \cdots + 1.58088u - 3.99294 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 4.27517u^{22} - 1.90167u^{21} + \cdots + 10.9963u - 7.43747 \\ 0.325782u^{22} + 0.886134u^{21} + \cdots + 7.99290u - 4.83426 \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} -2.56863u^{22} + 0.695455u^{21} + \cdots - 13.1510u + 1.06396 \\ -2.57971u^{22} + 1.28620u^{21} + \cdots - 9.48726u + 5.94213 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.598057u^{22} + 1.30233u^{21} + \cdots + 4.71204u + 5.08438 \\ 1.69862u^{22} + 0.393112u^{21} + \cdots + 15.8887u - 6.69634 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes

$$= \frac{36632544074525}{3200805062239}u^{22} - \frac{23085135423462}{3200805062239}u^{21} + \cdots + \frac{89601441698510}{3200805062239}u - \frac{81515705395485}{3200805062239}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{23} - u^{22} + \cdots + 4u^2 - 1$
c_2	$u^{23} - 9u^{22} + \cdots + 88u - 11$
c_3	$u^{23} - u^{22} + \cdots - u^2 - 1$
c_4	$u^{23} - 3u^{21} + \cdots + 5u + 1$
c_5	$u^{23} + 9u^{22} + \cdots + 88u + 11$
c_6	$u^{23} + 8u^{21} + \cdots + u - 1$
c_7	$u^{23} - u^{22} + \cdots - 4u + 1$
c_8	$u^{23} + u^{22} + \cdots - 3u - 1$
c_9	$u^{23} + 8u^{21} + \cdots + u + 1$
c_{10}	$u^{23} - 8u^{21} + \cdots + 13u - 1$
c_{11}, c_{12}	$u^{23} - u^{22} + \cdots - 3u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{23} + 7y^{22} + \cdots + 8y - 1$
c_2, c_5	$y^{23} + 13y^{22} + \cdots - 418y - 121$
c_3	$y^{23} + 9y^{22} + \cdots - 2y - 1$
c_4	$y^{23} - 6y^{22} + \cdots + 17y - 1$
c_6, c_9	$y^{23} + 16y^{22} + \cdots + y - 1$
c_7	$y^{23} - 7y^{22} + \cdots - 8y - 1$
c_8, c_{11}, c_{12}	$y^{23} - 13y^{22} + \cdots + 19y - 1$
c_{10}	$y^{23} - 16y^{22} + \cdots + 67y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.04348$ $a=\ \ 0.186091$ $b=\ \ 0.753788$	-2.87298	-18.0690
$u=-0.664063+0.943098I$ $a=\ \ 0.685970+0.966250I$ $b=-0.569285+0.905311I$	$3.29876+4.65028I$	$-0.98001-3.86096I$
$u=-0.664063-0.943098I$ $a=\ \ 0.685970-0.966250I$ $b=-0.569285-0.905311I$	$3.29876-4.65028I$	$-0.98001+3.86096I$
$u=-0.651688+0.414639I$ $a=\ \ 0.336676-1.276670I$ $b=\ \ 1.189520-0.108095I$	$-2.78319+1.65732I$	$-2.40871-5.71074I$
$u=-0.651688-0.414639I$ $a=\ \ 0.336676+1.276670I$ $b=\ \ 1.189520+0.108095I$	$-2.78319-1.65732I$	$-2.40871+5.71074I$
$u=-0.681262+0.184332I$ $a=\ \ 0.569301-0.688734I$ $b=-1.062700+0.406261I$	$2.16743+3.23271I$	$-3.58442+1.29756I$
$u=-0.681262-0.184332I$ $a=\ \ 0.569301+0.688734I$ $b=-1.062700-0.406261I$	$2.16743-3.23271I$	$-3.58442-1.29756I$
$u=\ \ 0.694058+1.101970I$ $a=\ \ 0.255791-1.003080I$ $b=-0.45605-1.81744I$	$6.42155-2.33889I$	$-0.62038+2.50500I$
$u=\ \ 0.694058-1.101970I$ $a=\ \ 0.255791+1.003080I$ $b=-0.45605+1.81744I$	$6.42155+2.33889I$	$-0.62038-2.50500I$
$u=-0.941533+0.914490I$ $a=-0.826024-1.090000I$ $b=\ \ 0.417785-0.988387I$	$1.36751+4.63600I$	$3.14920-3.22216I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.941533-0.914490I$ $a=-0.826024+1.090000I$ $b=\ 0.417785+0.988387I$	$1.36751-4.63600I$	$3.14920+3.22216I$
$u=\ 1.313860+0.211685I$ $a=\ 0.251038+0.443133I$ $b=\ 0.427917-0.312916I$	$-6.88091-2.68742I$	$-11.27297-1.77001I$
$u=\ 1.313860-0.211685I$ $a=\ 0.251038-0.443133I$ $b=\ 0.427917+0.312916I$	$-6.88091+2.68742I$	$-11.27297+1.77001I$
$u=-1.44708+0.16614I$ $a=\ 0.224237+0.573848I$ $b=\ 0.090985+0.602410I$	$-1.37900+0.85896I$	$-12.3793-7.8029I$
$u=-1.44708-0.16614I$ $a=\ 0.224237-0.573848I$ $b=\ 0.090985-0.602410I$	$-1.37900-0.85896I$	$-12.3793+7.8029I$
$u=\ 1.45654+0.11386I$ $a=\ 0.228446-0.393877I$ $b=-0.459533-0.102140I$	$-5.18757-7.22928I$	$-10.56655+8.90804I$
$u=\ 1.45654-0.11386I$ $a=\ 0.228446+0.393877I$ $b=-0.459533+0.102140I$	$-5.18757+7.22928I$	$-10.56655-8.90804I$
$u=\ 1.12449+0.97445I$ $a=-0.667965+0.669158I$ $b=\ 0.42725+1.78877I$	$5.14593-5.17174I$	$-3.71472+6.91746I$
$u=\ 1.12449-0.97445I$ $a=-0.667965-0.669158I$ $b=\ 0.42725-1.78877I$	$5.14593+5.17174I$	$-3.71472-6.91746I$
$u=\ 0.414919+0.284656I$ $a=\ 0.70756+2.63982I$ $b=\ 1.083190+0.759470I$	$-3.50970+0.39783I$	$-5.42174-5.80351I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.414919 - 0.284656I$		
$a = 0.70756 - 2.63982I$	$-3.50970 - 0.39783I$	$-5.42174 + 5.80351I$
$b = 1.083190 - 0.759470I$		
$u = 0.403492 + 0.147341I$		
$a = 1.14193 + 2.95973I$	$-0.51419 - 7.27979I$	$-6.66615 + 5.52222I$
$b = -0.965980 + 0.449954I$		
$u = 0.403492 - 0.147341I$		
$a = 1.14193 - 2.95973I$	$-0.51419 + 7.27979I$	$-6.66615 - 5.52222I$
$b = -0.965980 - 0.449954I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{23}-u^{22}+\cdots+4u^2-1)(u^{82}-4u^{81}+\cdots-14492u+15032)$
c_2	$(u^{23}-9u^{22}+\cdots+88u-11)(u^{82}-2u^{81}+\cdots+386u-21)$
c_3	$(u^{23}-u^{22}+\cdots-u^2-1)(u^{82}-2u^{81}+\cdots-9468926u-944291)$
c_4	$(u^{23}-3u^{21}+\cdots+5u+1)(u^{82}+u^{81}+\cdots+12069u+3617)$
c_5	$(u^{23}+9u^{22}+\cdots+88u+11)(u^{82}-2u^{81}+\cdots+386u-21)$
c_6	$(u^{23}+8u^{21}+\cdots+u-1)(u^{82}+u^{81}+\cdots+403u+61)$
c_7	$(u^{23}-u^{22}+\cdots-4u+1)(u^{82}+2u^{81}+\cdots+28u-151)$
c_8	$(u^{23}+u^{22}+\cdots-3u-1)(u^{82}+6u^{81}+\cdots-11u-3)$
c_9	$(u^{23}+8u^{21}+\cdots+u+1)(u^{82}+u^{81}+\cdots+403u+61)$
c_{10}	$(u^{23}-8u^{21}+\cdots+13u-1)(u^{82}-u^{81}+\cdots-2699225u+632501)$
c_{11}, c_{12}	$(u^{23}-u^{22}+\cdots-3u+1)(u^{82}+6u^{81}+\cdots-11u-3)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{23}+7y^{22}+\cdots+8y-1)$ $\cdot(y^{82}+70y^{81}+\cdots+3143561008y+225961024)$
c_2, c_5	$(y^{23}+13y^{22}+\cdots-418y-121)(y^{82}+52y^{81}+\cdots-12412y+441)$
c_3	$(y^{23}+9y^{22}+\cdots-2y-1)$ $\cdot(y^{82}+48y^{81}+\cdots-10989606497604y+891685492681)$
c_4	$(y^{23}-6y^{22}+\cdots+17y-1)$ $\cdot(y^{82}-71y^{81}+\cdots-240578075y+13082689)$
c_6, c_9	$(y^{23}+16y^{22}+\cdots+y-1)(y^{82}+47y^{81}+\cdots+37305y+3721)$
c_7	$(y^{23}-7y^{22}+\cdots-8y-1)(y^{82}+4y^{81}+\cdots-246310y+22801)$
c_8, c_{11}, c_{12}	$(y^{23}-13y^{22}+\cdots+19y-1)(y^{82}-18y^{81}+\cdots-397y+9)$
c_{10}	$(y^{23}-16y^{22}+\cdots+67y-1)$ $\cdot(y^{82}-45y^{81}+\cdots-21983555058121y+400057515001)$