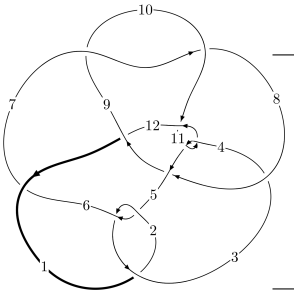
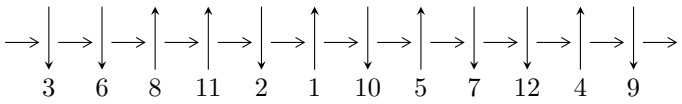
$12a_{0328}$ $(K12a_{0328})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 1.70687 \times 10^{211} u^{118} + 3.37461 \times 10^{211} u^{117} + \cdots + 8.64942 \times 10^{211} b - 9.37981 \times 10^{210}, \\ & - 7.88628 \times 10^{211} u^{118} - 1.11014 \times 10^{212} u^{117} + \cdots + 8.64942 \times 10^{211} a - 7.17770 \times 10^{211}, \\ & u^{119} + u^{118} + \cdots + 6u^3 - 1 \rangle \end{aligned}$$

* 1 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 119 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. $\boldsymbol{I_1^u = \langle 1.71 \times 10^{211} u^{118} + 3.37 \times 10^{211} u^{117} + \cdots + 8.65 \times 10^{211} b - 9.38 \times 10^{210},\ -7.89 \times 10^{211} u^{118} - 1.11 \times 10^{212} u^{117} + \cdots + 8.65 \times 10^{211} a - 7.18 \times 10^{211},\ u^{119} + u^{118} + \cdots + 6u^3 - 1 \rangle}$

(i) Arc colorings

$$a_5 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.911771u^{118} + 1.28348u^{117} + \cdots + 2.73608u + 0.829848 \\ -0.197340u^{118} - 0.390155u^{117} + \cdots + 3.02815u + 0.108444 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 6.16028u^{118} + 18.7998u^{117} + \cdots - 9.46738u - 6.81870 \\ 0.118377u^{118} + 0.288043u^{117} + \cdots - 2.58392u - 0.347143 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 1.10911u^{118} + 1.67364u^{117} + \cdots - 0.292070u + 0.721403 \\ -0.197340u^{118} - 0.390155u^{117} + \cdots + 3.02815u + 0.108444 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 6.74545u^{118} + 11.0054u^{117} + \cdots - 10.6102u + 6.29458 \\ -0.402188u^{118} - 0.330942u^{117} + \cdots - 0.839212u - 0.854920 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -4.89537u^{118} + 2.24574u^{117} + \cdots - 9.23476u - 13.1781 \\ -0.0909481u^{118} - 0.524014u^{117} + \cdots - 1.06313u + 0.256362 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} u^3 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1.28677u^{118} + 1.96274u^{117} + \cdots - 0.261183u + 0.837056 \\ u^5 + u^3 + u \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 2.97016u^{118} - 2.49208u^{117} + \cdots + 10.4643u + 12.8050 \\ -0.373239u^{118} - 0.644814u^{117} + \cdots + 0.823097u - 0.355463 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 13.5515u^{118} + 6.25918u^{117} + \cdots + 10.9668u + 7.26890$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{119}+61u^{118}+\cdots-6u^2+1$
c_2, c_5	$u^{119}+3u^{118}+\cdots-2u-1$
c_3	$u^{119}-47u^{118}+\cdots+58256u+9073$
c_4, c_{11}	$u^{119}-u^{118}+\cdots+6u^3+1$
c_6	$u^{119}+9u^{118}+\cdots-1371018u-230023$
c_7, c_9	$u^{119}-u^{118}+\cdots+12u+1$
c_8	$u^{119}-5u^{118}+\cdots-12u+1$
c_{10}	$u^{119}+51u^{118}+\cdots+34u^2-1$
c_{12}	$u^{119}+35u^{118}+\cdots-56241420u+3394117$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{119} - 5y^{118} + \cdots + 12y - 1$
c_2, c_5	$y^{119} - 61y^{118} + \cdots + 6y^2 - 1$
c_3	$y^{119} - 397y^{118} + \cdots - 3607146724y - 82319329$
c_4, c_{11}	$y^{119} + 51y^{118} + \cdots + 34y^2 - 1$
c_6	$y^{119} + 71y^{118} + \cdots + 1471310282400y - 52910580529$
c_7, c_9	$y^{119} - 81y^{118} + \cdots - 1492y - 1$
c_8	$y^{119} + 3y^{118} + \cdots + 20y - 1$
c_{10}	$y^{119} + 35y^{118} + \cdots + 68y - 1$
c_{12}	$y^{119} - 445y^{118} + \cdots + 623753540590748y - 11520030209689$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.507767 + 0.852018I$ $a = -17.4014 - 9.7972I$ $b = -0.0915980 + 0.0603831I$	$-4.11636 - 1.62276I$	0
$u = 0.507767 - 0.852018I$ $a = -17.4014 + 9.7972I$ $b = -0.0915980 - 0.0603831I$	$-4.11636 + 1.62276I$	0
$u = 0.911948 + 0.435304I$ $a = 1.17368 - 0.88985I$ $b = 1.05672 - 0.95507I$	$-1.50578 - 8.38772I$	0
$u = 0.911948 - 0.435304I$ $a = 1.17368 + 0.88985I$ $b = 1.05672 + 0.95507I$	$-1.50578 + 8.38772I$	0
$u = -0.909097 + 0.443170I$ $a = -1.26092 - 0.98111I$ $b = -1.11844 - 1.03475I$	$-4.3954 + 13.5491I$	0
$u = -0.909097 - 0.443170I$ $a = -1.26092 + 0.98111I$ $b = -1.11844 + 1.03475I$	$-4.3954 - 13.5491I$	0
$u = -0.760174 + 0.615271I$ $a = 1.231780 + 0.453997I$ $b = 1.094530 + 0.200258I$	$3.75962 - 3.02610I$	0
$u = -0.760174 - 0.615271I$ $a = 1.231780 - 0.453997I$ $b = 1.094530 - 0.200258I$	$3.75962 + 3.02610I$	0
$u = -0.478063 + 0.904527I$ $a = -4.15321 + 2.10750I$ $b = -0.292600 - 0.137465I$	$-1.79196 - 2.13409I$	0
$u = -0.478063 - 0.904527I$ $a = -4.15321 - 2.10750I$ $b = -0.292600 + 0.137465I$	$-1.79196 + 2.13409I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.896926 + 0.383197I$ $a = 1.006870 - 0.389405I$ $b = 0.979939 - 0.533142I$	$2.09309 - 6.45111I$	0
$u = 0.896926 - 0.383197I$ $a = 1.006870 + 0.389405I$ $b = 0.979939 + 0.533142I$	$2.09309 + 6.45111I$	0
$u = -0.926650 + 0.438417I$ $a = -0.991364 - 0.984139I$ $b = -0.902219 - 1.016180I$	$-6.14241 + 4.61417I$	0
$u = -0.926650 - 0.438417I$ $a = -0.991364 + 0.984139I$ $b = -0.902219 + 1.016180I$	$-6.14241 - 4.61417I$	0
$u = 0.317324 + 0.915221I$ $a = 1.52737 - 1.24577I$ $b = 0.705961 + 0.923416I$	$-3.72726 - 0.13007I$	0
$u = 0.317324 - 0.915221I$ $a = 1.52737 + 1.24577I$ $b = 0.705961 - 0.923416I$	$-3.72726 + 0.13007I$	0
$u = 0.497365 + 0.915932I$ $a = -1.138100 - 0.133344I$ $b = 0.123153 - 0.145374I$	$-2.46590 - 1.67574I$	0
$u = 0.497365 - 0.915932I$ $a = -1.138100 + 0.133344I$ $b = 0.123153 + 0.145374I$	$-2.46590 + 1.67574I$	0
$u = -0.887010 + 0.326181I$ $a = -0.805184 - 0.171185I$ $b = -0.854529 - 0.317621I$	$2.58601 + 1.27765I$	0
$u = -0.887010 - 0.326181I$ $a = -0.805184 + 0.171185I$ $b = -0.854529 + 0.317621I$	$2.58601 - 1.27765I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.108819+0.938452I$ $a=-1.254970-0.338159I$ $b=\ \ 0.39425+1.39638I$	$-4.96481+6.39537I$	0
$u=-0.108819-0.938452I$ $a=-1.254970+0.338159I$ $b=\ \ 0.39425-1.39638I$	$-4.96481-6.39537I$	0
$u=-0.174495+0.927558I$ $a=-1.38301-0.58605I$ $b=\ \ 0.00710+1.46473I$	$-5.81182-1.53718I$	0
$u=-0.174495-0.927558I$ $a=-1.38301+0.58605I$ $b=\ \ 0.00710-1.46473I$	$-5.81182+1.53718I$	0
$u=\ \ 0.361459+0.993292I$ $a=\ \ 1.61538-1.40671I$ $b=\ \ 1.62229+0.65511I$	$-5.04980+1.10678I$	0
$u=\ \ 0.361459-0.993292I$ $a=\ \ 1.61538+1.40671I$ $b=\ \ 1.62229-0.65511I$	$-5.04980-1.10678I$	0
$u=\ \ 0.498964+0.793602I$ $a=-3.60544-3.19666I$ $b=-0.142825+0.397651I$	$-3.93838+5.80847I$	0
$u=\ \ 0.498964-0.793602I$ $a=-3.60544+3.19666I$ $b=-0.142825-0.397651I$	$-3.93838-5.80847I$	0
$u=-0.346223+1.004940I$ $a=-1.73275-1.45246I$ $b=-1.76267+0.92830I$	$-8.17103+3.09878I$	0
$u=-0.346223-1.004940I$ $a=-1.73275+1.45246I$ $b=-1.76267-0.92830I$	$-8.17103-3.09878I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.732052 + 0.579438I$ $a = -1.24958 + 0.74008I$ $b = -1.176320 + 0.447728I$	$4.15857 - 1.53178I$	0
$u = 0.732052 - 0.579438I$ $a = -1.24958 - 0.74008I$ $b = -1.176320 - 0.447728I$	$4.15857 + 1.53178I$	0
$u = -0.511516 + 0.943991I$ $a = 0.29654 + 1.66321I$ $b = -0.232984 - 0.569254I$	$-1.39119 - 2.55212I$	0
$u = -0.511516 - 0.943991I$ $a = 0.29654 - 1.66321I$ $b = -0.232984 + 0.569254I$	$-1.39119 + 2.55212I$	0
$u = -0.586912 + 0.901135I$ $a = 1.138480 + 0.317483I$ $b = 0.310216 - 0.239989I$	$0.16909 - 2.33076I$	0
$u = -0.586912 - 0.901135I$ $a = 1.138480 - 0.317483I$ $b = 0.310216 + 0.239989I$	$0.16909 + 2.33076I$	0
$u = -0.370037 + 1.011430I$ $a = -1.55822 - 1.55371I$ $b = -1.93579 + 0.53179I$	$-8.34868 - 5.10443I$	0
$u = -0.370037 - 1.011430I$ $a = -1.55822 + 1.55371I$ $b = -1.93579 - 0.53179I$	$-8.34868 + 5.10443I$	0
$u = 0.434054 + 0.988723I$ $a = 0.967384 - 0.925980I$ $b = 1.289280 - 0.395692I$	$-4.48894 + 2.96975I$	0
$u = 0.434054 - 0.988723I$ $a = 0.967384 + 0.925980I$ $b = 1.289280 + 0.395692I$	$-4.48894 - 2.96975I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.446642+0.790384I$ $a=\ \ 0.77478-2.99291I$ $b=-0.049396+0.468882I$	$-1.41471-1.74994I$	0
$u=-0.446642-0.790384I$ $a=\ \ 0.77478+2.99291I$ $b=-0.049396-0.468882I$	$-1.41471+1.74994I$	0
$u=\ \ 0.552326+0.944839I$ $a=-1.63723+0.38867I$ $b=-0.044369-0.553290I$	$-2.96819+5.68794I$	0
$u=\ \ 0.552326-0.944839I$ $a=-1.63723-0.38867I$ $b=-0.044369+0.553290I$	$-2.96819-5.68794I$	0
$u=\ \ 0.117298+0.892732I$ $a=\ \ 1.150630-0.466992I$ $b=-0.244933+1.222510I$	$-2.24445-1.90031I$	0
$u=\ \ 0.117298-0.892732I$ $a=\ \ 1.150630+0.466992I$ $b=-0.244933-1.222510I$	$-2.24445+1.90031I$	0
$u=\ \ 0.524119+1.000970I$ $a=-0.939323+0.042790I$ $b=\ \ 0.207367-1.251020I$	$-2.31178+5.78069I$	0
$u=\ \ 0.524119-1.000970I$ $a=-0.939323-0.042790I$ $b=\ \ 0.207367+1.251020I$	$-2.31178-5.78069I$	0
$u=\ \ 0.693098+0.525034I$ $a=-1.05281+1.26958I$ $b=-1.16628+0.90453I$	$2.21710-2.81315I$	0
$u=\ \ 0.693098-0.525034I$ $a=-1.05281-1.26958I$ $b=-1.16628-0.90453I$	$2.21710+2.81315I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.470474+1.034840I$ $a=\ \ 0.286777-1.343870I$ $b=-1.42267-1.52005I$	$-7.68172-1.31210I$	0
$u=-0.470474-1.034840I$ $a=\ \ 0.286777+1.343870I$ $b=-1.42267+1.52005I$	$-7.68172+1.31210I$	0
$u=\ \ 0.484305+1.028530I$ $a=-0.507609-1.015820I$ $b=\ \ 1.06929-1.55739I$	$-4.22041+5.15100I$	0
$u=\ \ 0.484305-1.028530I$ $a=-0.507609+1.015820I$ $b=\ \ 1.06929+1.55739I$	$-4.22041-5.15100I$	0
$u=-0.698549+0.503595I$ $a=\ \ 1.11344+1.49995I$ $b=\ \ 1.26314+1.05111I$	$-0.40692+7.54428I$	0
$u=-0.698549-0.503595I$ $a=\ \ 1.11344-1.49995I$ $b=\ \ 1.26314-1.05111I$	$-0.40692-7.54428I$	0
$u=\ \ 0.956192+0.626051I$ $a=-0.757600-0.473210I$ $b=-0.616969-0.574460I$	$-3.35830+8.78100I$	0
$u=\ \ 0.956192-0.626051I$ $a=-0.757600+0.473210I$ $b=-0.616969+0.574460I$	$-3.35830-8.78100I$	0
$u=-0.487407+1.040000I$ $a=\ \ 0.74377-1.22375I$ $b=-1.11841-1.83821I$	$-7.23390-9.51971I$	0
$u=-0.487407-1.040000I$ $a=\ \ 0.74377+1.22375I$ $b=-1.11841+1.83821I$	$-7.23390+9.51971I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.647053+0.509851I$ $a=\ \ 0.59478+1.34712I$ $b=\ \ 0.882172+1.077710I$	$-1.71268-0.36144I$	0
$u=-0.647053-0.509851I$ $a=\ \ 0.59478-1.34712I$ $b=\ \ 0.882172-1.077710I$	$-1.71268+0.36144I$	0
$u=-0.425188+0.693702I$ $a=\ \ 0.494424-0.708284I$ $b=\ \ 0.006772+0.636249I$	$-0.57615-1.49617I$	0
$u=-0.425188-0.693702I$ $a=\ \ 0.494424+0.708284I$ $b=\ \ 0.006772-0.636249I$	$-0.57615+1.49617I$	0
$u=-0.584014+1.037170I$ $a=\ \ 1.90385+0.51378I$ $b=\ \ 1.02644-1.47585I$	$-3.25098-4.47688I$	0
$u=-0.584014-1.037170I$ $a=\ \ 1.90385-0.51378I$ $b=\ \ 1.02644+1.47585I$	$-3.25098+4.47688I$	0
$u=-0.644746+1.007090I$ $a=\ \ 1.24583+0.92862I$ $b=\ \ 1.073010-0.444224I$	$2.57596-2.29660I$	0
$u=-0.644746-1.007090I$ $a=\ \ 1.24583-0.92862I$ $b=\ \ 1.073010+0.444224I$	$2.57596+2.29660I$	0
$u=\ \ 0.625532+1.023680I$ $a=-1.50146+0.95552I$ $b=-1.22114-0.72276I$	$2.82624+6.71909I$	0
$u=\ \ 0.625532-1.023680I$ $a=-1.50146-0.95552I$ $b=-1.22114+0.72276I$	$2.82624-6.71909I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.599950 + 1.039800I$ $a = -1.88655 + 0.78262I$ $b = -1.28438 - 1.25332I$	$0.69691 + 7.81343I$	0
$u = 0.599950 - 1.039800I$ $a = -1.88655 - 0.78262I$ $b = -1.28438 + 1.25332I$	$0.69691 - 7.81343I$	0
$u = -0.977219 + 0.698896I$ $a = 0.612150 - 0.210674I$ $b = 0.520754 - 0.345549I$	$-0.16968 - 3.52871I$	0
$u = -0.977219 - 0.698896I$ $a = 0.612150 + 0.210674I$ $b = 0.520754 + 0.345549I$	$-0.16968 + 3.52871I$	0
$u = -0.598032 + 1.048290I$ $a = 2.04284 + 0.80640I$ $b = 1.41976 - 1.39274I$	$-2.00840 - 12.54820I$	0
$u = -0.598032 - 1.048290I$ $a = 2.04284 - 0.80640I$ $b = 1.41976 + 1.39274I$	$-2.00840 + 12.54820I$	0
$u = 1.115650 + 0.524422I$ $a = -0.066091 - 0.458183I$ $b = -0.012401 - 0.502670I$	$-5.14009 - 0.87754I$	0
$u = 1.115650 - 0.524422I$ $a = -0.066091 + 0.458183I$ $b = -0.012401 + 0.502670I$	$-5.14009 + 0.87754I$	0
$u = -0.047454 + 1.272010I$ $a = 0.148691 + 0.258874I$ $b = -0.756451 - 1.139640I$	$-10.6319 + 10.8392I$	0
$u = -0.047454 - 1.272010I$ $a = 0.148691 - 0.258874I$ $b = -0.756451 + 1.139640I$	$-10.6319 - 10.8392I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.052332 + 1.282040I$ $a = -0.139923 + 0.230211I$ $b = 0.656587 - 1.049020I$	$-7.73552 - 5.59515I$	0
$u = 0.052332 - 1.282040I$ $a = -0.139923 - 0.230211I$ $b = 0.656587 + 1.049020I$	$-7.73552 + 5.59515I$	0
$u = -0.035355 + 1.291080I$ $a = 0.091848 + 0.236684I$ $b = -0.466738 - 1.167490I$	$-12.51560 + 1.79501I$	0
$u = -0.035355 - 1.291080I$ $a = 0.091848 - 0.236684I$ $b = -0.466738 + 1.167490I$	$-12.51560 - 1.79501I$	0
$u = 0.599686 + 0.375773I$ $a = 0.249306 + 0.656236I$ $b = 0.733861 + 0.420756I$	$-0.82696 + 5.62929I$	$0.40223 - 5.17900I$
$u = 0.599686 - 0.375773I$ $a = 0.249306 - 0.656236I$ $b = 0.733861 - 0.420756I$	$-0.82696 - 5.62929I$	$0.40223 + 5.17900I$
$u = -0.044354 + 0.701238I$ $a = 0.633078 - 0.369539I$ $b = -0.232159 + 0.670286I$	$-0.74412 - 1.54864I$	$-2.53683 + 5.51244I$
$u = -0.044354 - 0.701238I$ $a = 0.633078 + 0.369539I$ $b = -0.232159 - 0.670286I$	$-0.74412 + 1.54864I$	$-2.53683 - 5.51244I$
$u = -0.656780 + 1.138640I$ $a = -1.82933 - 0.77459I$ $b = -1.21927 + 1.17702I$	$-6.5131 - 19.2984I$	0
$u = -0.656780 - 1.138640I$ $a = -1.82933 + 0.77459I$ $b = -1.21927 - 1.17702I$	$-6.5131 + 19.2984I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.654956 + 1.141600I$ $a = 1.70693 - 0.74667I$ $b = 1.15723 + 1.11490I$	$-3.6554 + 14.1350I$	0
$u = 0.654956 - 1.141600I$ $a = 1.70693 + 0.74667I$ $b = 1.15723 - 1.11490I$	$-3.6554 - 14.1350I$	0
$u = 0.638895 + 1.151670I$ $a = 1.20717 - 0.82631I$ $b = 1.031890 + 0.789595I$	$-0.21332 + 12.09040I$	0
$u = 0.638895 - 1.151670I$ $a = 1.20717 + 0.82631I$ $b = 1.031890 - 0.789595I$	$-0.21332 - 12.09040I$	0
$u = -0.659496 + 1.145590I$ $a = -1.69618 - 0.54210I$ $b = -1.03008 + 1.18405I$	$-8.30416 - 10.41650I$	0
$u = -0.659496 - 1.145590I$ $a = -1.69618 + 0.54210I$ $b = -1.03008 - 1.18405I$	$-8.30416 + 10.41650I$	0
$u = -0.629982 + 1.164430I$ $a = -0.946035 - 0.733459I$ $b = -0.896154 + 0.660527I$	$0.11150 - 6.85773I$	0
$u = -0.629982 - 1.164430I$ $a = -0.946035 + 0.733459I$ $b = -0.896154 - 0.660527I$	$0.11150 + 6.85773I$	0
$u = -0.600553 + 0.274322I$ $a = -0.302262 + 0.365432I$ $b = -0.669223 + 0.235528I$	$1.44318 - 0.98583I$	$4.97697 + 0.88310I$
$u = -0.600553 - 0.274322I$ $a = -0.302262 - 0.365432I$ $b = -0.669223 - 0.235528I$	$1.44318 + 0.98583I$	$4.97697 - 0.88310I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.421752 + 0.466224I$ $a = -0.344239 + 0.393869I$ $b = 0.374796 + 0.518074I$	$-1.98322 - 1.56082I$	$-2.35466 + 0.62203I$
$u = 0.421752 - 0.466224I$ $a = -0.344239 - 0.393869I$ $b = 0.374796 - 0.518074I$	$-1.98322 + 1.56082I$	$-2.35466 - 0.62203I$
$u = 0.678958 + 1.191600I$ $a = 0.876815 - 0.014523I$ $b = 0.394869 + 0.834141I$	$-7.52028 + 7.24517I$	0
$u = 0.678958 - 1.191600I$ $a = 0.876815 + 0.014523I$ $b = 0.394869 - 0.834141I$	$-7.52028 - 7.24517I$	0
$u = 0.410343 + 0.463348I$ $a = 0.914909 + 0.214594I$ $b = 0.020651 + 0.953566I$	$-0.88393 - 1.64826I$	$-2.02657 + 4.96990I$
$u = 0.410343 - 0.463348I$ $a = 0.914909 - 0.214594I$ $b = 0.020651 - 0.953566I$	$-0.88393 + 1.64826I$	$-2.02657 - 4.96990I$
$u = 0.11337 + 1.41365I$ $a = -0.0761282 + 0.0404144I$ $b = 0.270135 - 0.448164I$	$-3.83043 - 3.01633I$	0
$u = 0.11337 - 1.41365I$ $a = -0.0761282 - 0.0404144I$ $b = 0.270135 + 0.448164I$	$-3.83043 + 3.01633I$	0
$u = -0.65760 + 1.27563I$ $a = -0.387479 - 0.130922I$ $b = -0.336058 + 0.420274I$	$-2.16433 - 3.72797I$	0
$u = -0.65760 - 1.27563I$ $a = -0.387479 + 0.130922I$ $b = -0.336058 - 0.420274I$	$-2.16433 + 3.72797I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.82461 + 1.22317I$ $a = 0.199201 + 0.293206I$ $b = -0.117781 + 0.421266I$	$-4.89994 - 2.14806I$	0
$u = 0.82461 - 1.22317I$ $a = 0.199201 - 0.293206I$ $b = -0.117781 - 0.421266I$	$-4.89994 + 2.14806I$	0
$u = -0.468808 + 0.233676I$ $a = -2.89778 + 0.97031I$ $b = -0.79266 + 1.18121I$	$-5.21871 + 5.59244I$	$-6.14017 - 5.18288I$
$u = -0.468808 - 0.233676I$ $a = -2.89778 - 0.97031I$ $b = -0.79266 - 1.18121I$	$-5.21871 - 5.59244I$	$-6.14017 + 5.18288I$
$u = 0.410599 + 0.234094I$ $a = 2.83343 + 0.39108I$ $b = 0.672003 + 0.938472I$	$-2.31401 - 1.33511I$	$-3.18069 + 1.51226I$
$u = 0.410599 - 0.234094I$ $a = 2.83343 - 0.39108I$ $b = 0.672003 - 0.938472I$	$-2.31401 + 1.33511I$	$-3.18069 - 1.51226I$
$u = -0.439635 + 0.164711I$ $a = -3.51386 + 0.55162I$ $b = -1.007280 + 0.848807I$	$-5.59622 - 2.40500I$	$-6.78569 + 2.74623I$
$u = -0.439635 - 0.164711I$ $a = -3.51386 - 0.55162I$ $b = -1.007280 - 0.848807I$	$-5.59622 + 2.40500I$	$-6.78569 - 2.74623I$
$u = 0.293010$ $a = 4.46780$ $b = 0.701167$	-2.52725	-1.08770

II. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^{119}+61u^{118}+\cdots-6u^2+1$
c_2, c_5	$u^{119}+3u^{118}+\cdots-2u-1$
c_3	$u^{119}-47u^{118}+\cdots+58256u+9073$
c_4, c_{11}	$u^{119}-u^{118}+\cdots+6u^3+1$
c_6	$u^{119}+9u^{118}+\cdots-1371018u-230023$
c_7, c_9	$u^{119}-u^{118}+\cdots+12u+1$
c_8	$u^{119}-5u^{118}+\cdots-12u+1$
c_{10}	$u^{119}+51u^{118}+\cdots+34u^2-1$
c_{12}	$u^{119}+35u^{118}+\cdots-56241420u+3394117$

III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^{119} - 5y^{118} + \cdots + 12y - 1$
c_2, c_5	$y^{119} - 61y^{118} + \cdots + 6y^2 - 1$
c_3	$y^{119} - 397y^{118} + \cdots - 3607146724y - 82319329$
c_4, c_{11}	$y^{119} + 51y^{118} + \cdots + 34y^2 - 1$
c_6	$y^{119} + 71y^{118} + \cdots + 1471310282400y - 52910580529$
c_7, c_9	$y^{119} - 81y^{118} + \cdots - 1492y - 1$
c_8	$y^{119} + 3y^{118} + \cdots + 20y - 1$
c_{10}	$y^{119} + 35y^{118} + \cdots + 68y - 1$
c_{12}	$y^{119} - 445y^{118} + \cdots + 623753540590748y - 11520030209689$