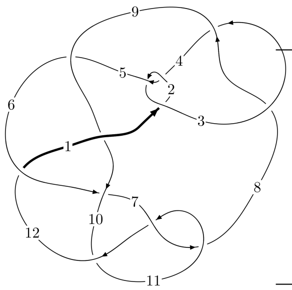
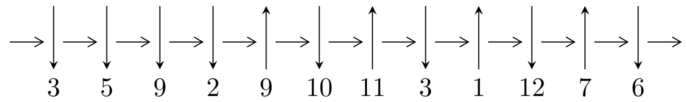
$12n_{0151}$ ($K12n_{0151}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned} I_1^u = \langle & 3.12647 \times 10^{124} u^{58} + 4.88388 \times 10^{124} u^{57} + \cdots + 1.00387 \times 10^{125} b + 4.11276 \times 10^{127}, \\ & -3.26562 \times 10^{125} u^{58} - 5.01296 \times 10^{125} u^{57} + \cdots + 2.00773 \times 10^{125} a - 4.08050 \times 10^{128}, \\ & u^{59} + u^{58} + \cdots + 2048u + 1024 \rangle \end{aligned}$$

$$I_1^v = \langle a,\ b-1,\ v^4 + v^2 - v + 1 \rangle$$
$$I_2^v = \langle a,\ b-1,\ v^6 + v^5 + 2v^4 + 2v^3 + 2v^2 + 2v + 1 \rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 69 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. $\boldsymbol{I_1^u = \langle 3.13 \times 10^{124} u^{58} + 4.88 \times 10^{124} u^{57} + \cdots + 1.00 \times 10^{125} b + 4.11 \times 10^{127},\ -3.27 \times 10^{125} u^{58} - 5.01 \times 10^{125} u^{57} + \cdots + 2.01 \times 10^{125} a - 4.08 \times 10^{128},\ u^{59} + u^{58} + \cdots + 2048 u + 1024 \rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

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

$$a_5 = \begin{pmatrix} 1.62652u^{58} + 2.49682u^{57} + \cdots + 8071.87u + 2032.39 \\ -0.311443u^{58} - 0.486506u^{57} + \cdots - 1587.44u - 409.691 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 1.62652u^{58} + 2.49682u^{57} + \cdots + 8071.87u + 2032.39 \\ 0.364133u^{58} + 0.570656u^{57} + \cdots + 1860.49u + 481.501 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1.62652u^{58} + 2.49682u^{57} + \cdots + 8071.87u + 2032.39 \\ -0.364133u^{58} - 0.570656u^{57} + \cdots - 1860.49u - 481.501 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 1.26239u^{58} + 1.92617u^{57} + \cdots + 6211.38u + 1550.89 \\ -0.364133u^{58} - 0.570656u^{57} + \cdots - 1860.49u - 481.501 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 2.30700u^{58} + 0.360471u^{57} + \cdots - 4216.20u - 4797.17 \\ -0.565229u^{58} - 0.116297u^{57} + \cdots + 894.169u + 1106.32 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 5.81545u^{58} + 7.39875u^{57} + \cdots + 21563.7u + 3635.94 \\ 1.51836u^{58} + 2.56526u^{57} + \cdots + 8651.47u + 2450.59 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -5.75244u^{58} - 8.42872u^{57} + \cdots - 26627.9u - 6229.64 \\ -1.53789u^{58} - 2.31822u^{57} + \cdots - 7427.88u - 1819.55 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -4.22067u^{58} - 3.95119u^{57} + \cdots - 8869.99u + 637.146 \\ -2.04332u^{58} - 2.01780u^{57} + \cdots - 4729.36u + 74.4945 \end{pmatrix}$$

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

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 12.9922u^{58} + 16.4987u^{57} + \cdots + 46831.5u + 7718.14$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{59} + 15u^{58} + \cdots + 15u + 1$
c_2, c_4	$u^{59} - 11u^{58} + \cdots - 11u + 1$
c_3, c_8	$u^{59} + u^{58} + \cdots + 2048u + 1024$
c_5	$u^{59} - 2u^{58} + \cdots + 2u + 1$
c_6	$u^{59} + 2u^{58} + \cdots + 480u + 72$
c_7, c_{11}	$u^{59} - 2u^{58} + \cdots - 4u^2 + 1$
c_9	$u^{59} + 8u^{58} + \cdots + 2958u + 53$
c_{10}	$u^{59} + 28u^{58} + \cdots + 8u - 1$
c_{12}	$u^{59} - 10u^{58} + \cdots - 1216u + 193$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{59} + 69y^{58} + \cdots - 13y - 1$
c_2, c_4	$y^{59} - 15y^{58} + \cdots + 15y - 1$
c_3, c_8	$y^{59} + 63y^{58} + \cdots - 22544384y - 1048576$
c_5	$y^{59} - 68y^{58} + \cdots + 8y - 1$
c_6	$y^{59} - 12y^{58} + \cdots + 184464y - 5184$
c_7, c_{11}	$y^{59} + 28y^{58} + \cdots + 8y - 1$
c_9	$y^{59} - 8y^{58} + \cdots + 8867000y - 2809$
c_{10}	$y^{59} + 8y^{58} + \cdots + 108y - 1$
c_{12}	$y^{59} + 20y^{58} + \cdots - 93136y - 37249$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.998103 + 0.081236I$ $a = 0.553279 + 0.202090I$ $b = 0.594657 - 0.582462I$	$-2.75669 + 1.28193I$	0
$u = -0.998103 - 0.081236I$ $a = 0.553279 - 0.202090I$ $b = 0.594657 + 0.582462I$	$-2.75669 - 1.28193I$	0
$u = 0.909539 + 0.365168I$ $a = 0.613308 - 0.288519I$ $b = 0.335049 + 0.628049I$	$2.24694 - 1.52880I$	0
$u = 0.909539 - 0.365168I$ $a = 0.613308 + 0.288519I$ $b = 0.335049 - 0.628049I$	$2.24694 + 1.52880I$	0
$u = -0.837696 + 0.475366I$ $a = 0.645204 + 0.335171I$ $b = 0.220526 - 0.634040I$	$0.76048 - 3.15014I$	0
$u = -0.837696 - 0.475366I$ $a = 0.645204 - 0.335171I$ $b = 0.220526 + 0.634040I$	$0.76048 + 3.15014I$	0
$u = 0.390732 + 0.845943I$ $a = 0.442369 + 0.035951I$ $b = 1.245730 - 0.182507I$	$-2.98778 + 6.48838I$	$-4.00000 - 4.86755I$
$u = 0.390732 - 0.845943I$ $a = 0.442369 - 0.035951I$ $b = 1.245730 + 0.182507I$	$-2.98778 - 6.48838I$	$-4.00000 + 4.86755I$
$u = 1.053350 + 0.234621I$ $a = 0.555069 - 0.252023I$ $b = 0.493660 + 0.678179I$	$1.56089 - 3.52655I$	0
$u = 1.053350 - 0.234621I$ $a = 0.555069 + 0.252023I$ $b = 0.493660 - 0.678179I$	$1.56089 + 3.52655I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.745671 + 0.508578I$ $a = 0.475006 + 0.082153I$ $b = 1.044090 - 0.353528I$	$-2.42601 - 4.17459I$	$-6.95458 + 5.22656I$
$u = 0.745671 - 0.508578I$ $a = 0.475006 - 0.082153I$ $b = 1.044090 + 0.353528I$	$-2.42601 + 4.17459I$	$-6.95458 - 5.22656I$
$u = 0.832959 + 0.249451I$ $a = 0.514927 + 0.109936I$ $b = 0.857363 - 0.396544I$	$-3.69687 + 2.56822I$	$-10.58010 - 3.67403I$
$u = 0.832959 - 0.249451I$ $a = 0.514927 - 0.109936I$ $b = 0.857363 + 0.396544I$	$-3.69687 - 2.56822I$	$-10.58010 + 3.67403I$
$u = -1.115200 + 0.205953I$ $a = 0.535395 + 0.248456I$ $b = 0.536821 - 0.713179I$	$-0.53472 + 8.44391I$	0
$u = -1.115200 - 0.205953I$ $a = 0.535395 - 0.248456I$ $b = 0.536821 + 0.713179I$	$-0.53472 - 8.44391I$	0
$u = -0.401206 + 0.746571I$ $a = 0.452052 - 0.037776I$ $b = 1.196800 + 0.183576I$	$-0.90878 - 1.77655I$	$-1.72770 + 0.28396I$
$u = -0.401206 - 0.746571I$ $a = 0.452052 + 0.037776I$ $b = 1.196800 - 0.183576I$	$-0.90878 + 1.77655I$	$-1.72770 - 0.28396I$
$u = 0.186981 + 0.800482I$ $a = 0.447704 + 0.017000I$ $b = 1.230400 - 0.084694I$	$-4.74840 - 0.55711I$	$-7.85243 + 1.55883I$
$u = 0.186981 - 0.800482I$ $a = 0.447704 - 0.017000I$ $b = 1.230400 + 0.084694I$	$-4.74840 + 0.55711I$	$-7.85243 - 1.55883I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.585460 + 0.521675I$ $a = 0.476336 - 0.060057I$ $b = 1.066510 + 0.260549I$	$-0.552842 - 0.321059I$	$-2.73785 - 1.45340I$
$u = -0.585460 - 0.521675I$ $a = 0.476336 + 0.060057I$ $b = 1.066510 - 0.260549I$	$-0.552842 + 0.321059I$	$-2.73785 + 1.45340I$
$u = -0.344966 + 0.584974I$ $a = 0.989053 + 0.444757I$ $b = -0.158993 - 0.378184I$	$-0.25427 + 2.25151I$	$-0.88439 - 3.01856I$
$u = -0.344966 - 0.584974I$ $a = 0.989053 - 0.444757I$ $b = -0.158993 + 0.378184I$	$-0.25427 - 2.25151I$	$-0.88439 + 3.01856I$
$u = 0.005163 + 0.654757I$ $a = 2.15076 + 0.83999I$ $b = -0.596583 - 0.157556I$	$-3.39992 - 7.96321I$	$-2.44045 + 7.77163I$
$u = 0.005163 - 0.654757I$ $a = 2.15076 - 0.83999I$ $b = -0.596583 + 0.157556I$	$-3.39992 + 7.96321I$	$-2.44045 - 7.77163I$
$u = 0.011811 + 0.651420I$ $a = 2.00434 - 0.69962I$ $b = -0.555268 + 0.155236I$	$-0.95728 + 3.13895I$	$0.53345 - 3.94025I$
$u = 0.011811 - 0.651420I$ $a = 2.00434 + 0.69962I$ $b = -0.555268 - 0.155236I$	$-0.95728 - 3.13895I$	$0.53345 + 3.94025I$
$u = 0.111459 + 0.623363I$ $a = 1.42041 - 0.50057I$ $b = -0.373755 + 0.220699I$	$0.62234 + 1.80022I$	$1.46582 - 4.56224I$
$u = 0.111459 - 0.623363I$ $a = 1.42041 + 0.50057I$ $b = -0.373755 - 0.220699I$	$0.62234 - 1.80022I$	$1.46582 + 4.56224I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.001805 + 0.630170I$ $a = 2.24681 + 0.44360I$ $b = -0.571624 - 0.084577I$	$-5.13604 - 0.16765I$	$-5.11369 + 0.60296I$
$u = -0.001805 - 0.630170I$ $a = 2.24681 - 0.44360I$ $b = -0.571624 + 0.084577I$	$-5.13604 + 0.16765I$	$-5.11369 - 0.60296I$
$u = -0.579721$ $a = 0.575386$ $b = 0.737962$	-1.10396	-8.80140
$u = 0.19820 + 1.41485I$ $a = 0.168080 + 1.201160I$ $b = -0.885740 - 0.816541I$	$0.693286 + 0.866196I$	0
$u = 0.19820 - 1.41485I$ $a = 0.168080 - 1.201160I$ $b = -0.885740 + 0.816541I$	$0.693286 - 0.866196I$	0
$u = 0.33794 + 1.44689I$ $a = 0.034774 + 1.229800I$ $b = -0.977026 - 0.812488I$	$0.40044 - 7.01056I$	0
$u = 0.33794 - 1.44689I$ $a = 0.034774 - 1.229800I$ $b = -0.977026 + 0.812488I$	$0.40044 + 7.01056I$	0
$u = -0.25718 + 1.49968I$ $a = 0.084876 - 1.159550I$ $b = -0.937211 + 0.857810I$	$3.75772 + 3.20443I$	0
$u = -0.25718 - 1.49968I$ $a = 0.084876 + 1.159550I$ $b = -0.937211 - 0.857810I$	$3.75772 - 3.20443I$	0
$u = 0.04696 + 1.65800I$ $a = 0.193873 - 0.944416I$ $b = -0.791424 + 1.016040I$	$3.69904 - 0.23163I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.04696 - 1.65800I$ $a = 0.193873 + 0.944416I$ $b = -0.791424 - 1.016040I$	$3.69904 + 0.23163I$	0
$u = -0.50336 + 1.59145I$ $a = -0.123627 - 1.133430I$ $b = -1.095100 + 0.871905I$	$2.73059 + 7.14739I$	0
$u = -0.50336 - 1.59145I$ $a = -0.123627 + 1.133430I$ $b = -1.095100 - 0.871905I$	$2.73059 - 7.14739I$	0
$u = 0.53071 + 1.64437I$ $a = -0.144074 + 1.095240I$ $b = -1.11806 - 0.89751I$	$7.55867 - 9.77831I$	0
$u = 0.53071 - 1.64437I$ $a = -0.144074 - 1.095240I$ $b = -1.11806 + 0.89751I$	$7.55867 + 9.77831I$	0
$u = -0.55751 + 1.63560I$ $a = -0.163068 - 1.100950I$ $b = -1.13165 + 0.88881I$	$5.3016 + 14.9246I$	0
$u = -0.55751 - 1.63560I$ $a = -0.163068 + 1.100950I$ $b = -1.13165 - 0.88881I$	$5.3016 - 14.9246I$	0
$u = 0.45548 + 1.68569I$ $a = -0.094411 + 1.064750I$ $b = -1.08263 - 0.93187I$	$8.89235 - 7.23820I$	0
$u = 0.45548 - 1.68569I$ $a = -0.094411 - 1.064750I$ $b = -1.08263 + 0.93187I$	$8.89235 + 7.23820I$	0
$u = -0.06440 + 1.74963I$ $a = 0.164970 + 0.902532I$ $b = -0.804022 - 1.072170I$	$8.58017 + 2.61249I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.06440-1.74963I$ $a=\ \ 0.164970-0.902532I$ $b=-0.804022+1.072170I$	$8.58017-2.61249I$	0
$u=-0.40556+1.70511I$ $a=-0.064015-1.047870I$ $b=-1.05808+0.95077I$	$7.86608+2.22410I$	0
$u=-0.40556-1.70511I$ $a=-0.064015+1.047870I$ $b=-1.05808-0.95077I$	$7.86608-2.22410I$	0
$u=\ \ 0.10531+1.75148I$ $a=\ \ 0.178722-0.887018I$ $b=-0.781712+1.083390I$	$6.43786-7.75949I$	0
$u=\ \ 0.10531-1.75148I$ $a=\ \ 0.178722+0.887018I$ $b=-0.781712-1.083390I$	$6.43786+7.75949I$	0
$u=\ \ 0.04475+1.76538I$ $a=\ \ 0.116249+0.933213I$ $b=-0.868556-1.055190I$	$9.59397+0.00079I$	0
$u=\ \ 0.04475-1.76538I$ $a=\ \ 0.116249-0.933213I$ $b=-0.868556+1.055190I$	$9.59397-0.00079I$	0
$u=-0.10471+1.77099I$ $a=\ \ 0.087935-0.948757I$ $b=-0.903142+1.045030I$	$8.37962+5.04404I$	0
$u=-0.10471-1.77099I$ $a=\ \ 0.087935+0.948757I$ $b=-0.903142-1.045030I$	$8.37962-5.04404I$	0

II. $\boldsymbol{I_1^v = \langle a,\ b-1,\ v^4+v^2-v+1\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_9 = \begin{pmatrix}v\\0\end{pmatrix}$$
$$a_4 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0\\1\end{pmatrix}$$
$$a_6 = \begin{pmatrix}v^2\\1\end{pmatrix}$$
$$a_2 = \begin{pmatrix}1\\-1\end{pmatrix}$$
$$a_1 = \begin{pmatrix}0\\-1\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}v\\-v\end{pmatrix}$$
$$a_7 = \begin{pmatrix}v^2-v+1\\v\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}v^2-v+1\\-v^2-1\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}v^3+1\\-1\end{pmatrix}$$
$$a_8 = \begin{pmatrix}v\\0\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -5v^3-4v^2-v-6$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^4$
c_3, c_8	u^4
c_4	$(u+1)^4$
c_5, c_7, c_9	u^4+u^2+u+1
c_6	$u^4+3u^3+4u^2+3u+2$
c_{10}	$u^4-2u^3+3u^2-u+1$
c_{11}	u^4+u^2-u+1
c_{12}	$u^4+2u^3+3u^2+u+1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^4$
c_3, c_8	y^4
c_5, c_7, c_9 c_{11}	$y^4 + 2y^3 + 3y^2 + y + 1$
c_6	$y^4 - y^3 + 2y^2 + 7y + 4$
c_{10}, c_{12}	$y^4 + 2y^3 + 7y^2 + 5y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^v	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$v = 0.547424 + 0.585652I$ $a = 0$ $b = 1.00000$	$-0.66484 + 1.39709I$	$-4.37800 - 4.77865I$
$v = 0.547424 - 0.585652I$ $a = 0$ $b = 1.00000$	$-0.66484 - 1.39709I$	$-4.37800 + 4.77865I$
$v = -0.547424 + 1.120870I$ $a = 0$ $b = 1.00000$	$-4.26996 - 7.64338I$	$-11.12200 + 5.79053I$
$v = -0.547424 - 1.120870I$ $a = 0$ $b = 1.00000$	$-4.26996 + 7.64338I$	$-11.12200 - 5.79053I$

III. $\boldsymbol{I_2^v = \langle a,\ b-1,\ v^6+v^5+2v^4+2v^3+2v^2+2v+1\rangle}$

(i) Arc colorings

$$a_3 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} v^2 \\ 1 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} v \\ -v \end{pmatrix}$$
$$a_7 = \begin{pmatrix} -v^4 \\ v^4+v^2+1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -v^4 \\ -v^2-1 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} v^5+v^3+v^2+v \\ v^5+2v^3+v+1 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} v \\ 0 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= 2v^5+v^4-v^3+3v^2-2v-8$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_2	$(u-1)^6$
c_3, c_8	u^6
c_4	$(u+1)^6$
c_5, c_7, c_9	$u^6 - u^5 + 2u^4 - 2u^3 + 2u^2 - 2u + 1$
c_6	$(u^3 - u^2 + 1)^2$
c_{10}	$u^6 - 3u^5 + 4u^4 - 2u^3 + 1$
c_{11}	$u^6 + u^5 + 2u^4 + 2u^3 + 2u^2 + 2u + 1$
c_{12}	$u^6 + 3u^5 + 4u^4 + 2u^3 + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^6$
c_3, c_8	y^6
c_5, c_7, c_9 c_{11}	$y^6+3y^5+4y^4+2y^3+1$
c_6	$(y^3-y^2+2y-1)^2$
c_{10}, c_{12}	$y^6-y^5+4y^4-2y^3+8y^2+1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^v	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$v = 0.498832 + 1.001300I$ $a = 0$ $b = 1.00000$	$-1.91067 + 2.82812I$	$-7.72532 - 2.61835I$
$v = 0.498832 - 1.001300I$ $a = 0$ $b = 1.00000$	$-1.91067 - 2.82812I$	$-7.72532 + 2.61835I$
$v = -0.284920 + 1.115140I$ $a = 0$ $b = 1.00000$	-6.04826	$-14.8442 - 0.2733I$
$v = -0.284920 - 1.115140I$ $a = 0$ $b = 1.00000$	-6.04826	$-14.8442 + 0.2733I$
$v = -0.713912 + 0.305839I$ $a = 0$ $b = 1.00000$	$-1.91067 + 2.82812I$	$-4.93045 - 2.21599I$
$v = -0.713912 - 0.305839I$ $a = 0$ $b = 1.00000$	$-1.91067 - 2.82812I$	$-4.93045 + 2.21599I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^{10})(u^{59}+15u^{58}+\cdots+15u+1)$
c_2	$((u-1)^{10})(u^{59}-11u^{58}+\cdots-11u+1)$
c_3, c_8	$u^{10}(u^{59}+u^{58}+\cdots+2048u+1024)$
c_4	$((u+1)^{10})(u^{59}-11u^{58}+\cdots-11u+1)$
c_5	$(u^4+u^2+u+1)(u^6-u^5+2u^4-2u^3+2u^2-2u+1)$ $\cdot\,(u^{59}-2u^{58}+\cdots+2u+1)$
c_6	$((u^3-u^2+1)^2)(u^4+3u^3+\cdots+3u+2)(u^{59}+2u^{58}+\cdots+480u+72)$
c_7	$(u^4+u^2+u+1)(u^6-u^5+2u^4-2u^3+2u^2-2u+1)$ $\cdot\,(u^{59}-2u^{58}+\cdots-4u^2+1)$
c_9	$(u^4+u^2+u+1)(u^6-u^5+2u^4-2u^3+2u^2-2u+1)$ $\cdot\,(u^{59}+8u^{58}+\cdots+2958u+53)$
c_{10}	$(u^4-2u^3+3u^2-u+1)(u^6-3u^5+4u^4-2u^3+1)$ $\cdot\,(u^{59}+28u^{58}+\cdots+8u-1)$
c_{11}	$(u^4+u^2-u+1)(u^6+u^5+2u^4+2u^3+2u^2+2u+1)$ $\cdot\,(u^{59}-2u^{58}+\cdots-4u^2+1)$
c_{12}	$(u^4+2u^3+3u^2+u+1)(u^6+3u^5+4u^4+2u^3+1)$ $\cdot\,(u^{59}-10u^{58}+\cdots-1216u+193)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^{10})(y^{59}+69y^{58}+\cdots-13y-1)$
c_2, c_4	$((y-1)^{10})(y^{59}-15y^{58}+\cdots+15y-1)$
c_3, c_8	$y^{10}(y^{59}+63y^{58}+\cdots-2.25444\times 10^7 y-1048576)$
c_5	$(y^4+2y^3+3y^2+y+1)(y^6+3y^5+4y^4+2y^3+1)$ $\cdot(y^{59}-68y^{58}+\cdots+8y-1)$
c_6	$(y^3-y^2+2y-1)^2(y^4-y^3+2y^2+7y+4)$ $\cdot(y^{59}-12y^{58}+\cdots+184464y-5184)$
c_7, c_{11}	$(y^4+2y^3+3y^2+y+1)(y^6+3y^5+4y^4+2y^3+1)$ $\cdot(y^{59}+28y^{58}+\cdots+8y-1)$
c_9	$(y^4+2y^3+3y^2+y+1)(y^6+3y^5+4y^4+2y^3+1)$ $\cdot(y^{59}-8y^{58}+\cdots+8867000y-2809)$
c_{10}	$(y^4+2y^3+7y^2+5y+1)(y^6-y^5+4y^4-2y^3+8y^2+1)$ $\cdot(y^{59}+8y^{58}+\cdots+108y-1)$
c_{12}	$(y^4+2y^3+7y^2+5y+1)(y^6-y^5+4y^4-2y^3+8y^2+1)$ $\cdot(y^{59}+20y^{58}+\cdots-93136y-37249)$