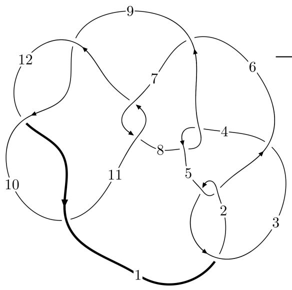
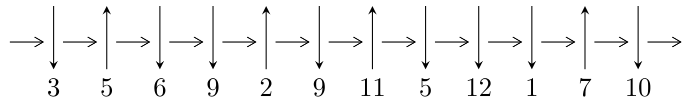
$12n_{0008}$ $(K12n_{0008})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$\begin{aligned}
I_1^u = \langle &-40170837860333u^{44} + 273898398784184u^{43} + \cdots + 57194726799376b - 67982681260688,\\
&19829193212635u^{44} - 141090112593855u^{43} + \cdots + 57194726799376a + 390935602889337,\\
&u^{45} - 7u^{44} + \cdots + 13u - 1\rangle
\end{aligned}$$

$$I_2^u = \langle -4a^4u - 2a^3u - 2a^3 + 15a^2 + 15au + 5b - 3u - 3,\ a^5 + 4a^3u + 4a^3 - 5a^2 - 2au + u + 1,\ u^2 + u + 1\rangle$$

$$I_3^u = \langle u^2 + b - u + 1,\ -u^4 + u^3 - u^2 + a + 1,\ u^5 - u^4 + 2u^3 - u^2 + u - 1\rangle$$

* 3 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 60 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. $I_1^u = \langle -4.02\times10^{13}u^{44} + 2.74\times10^{14}u^{43} + \cdots + 5.72\times10^{13}b - 6.80\times10^{13},\ 1.98\times10^{13}u^{44} - 1.41\times10^{14}u^{43} + \cdots + 5.72\times10^{13}a + 3.91\times10^{14},\ u^{45} - 7u^{44} + \cdots + 13u - 1\rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}1\\u^2\end{pmatrix}$$
$$a_6 = \begin{pmatrix}u\\u^3+u\end{pmatrix}$$
$$a_1 = \begin{pmatrix}u^2+1\\u^2\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}-0.346696u^{44} + 2.46684u^{43} + \cdots + 26.5461u - 6.83517\\0.702352u^{44} - 4.78888u^{43} + \cdots - 4.12647u + 1.18862\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-0.557267u^{44} + 3.84559u^{43} + \cdots + 30.7805u - 8.13179\\0.738824u^{44} - 5.11904u^{43} + \cdots - 4.10862u + 1.16824\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}0.948786u^{44} - 6.63640u^{43} + \cdots - 38.0499u + 9.08094\\-0.352063u^{44} + 2.54967u^{43} + \cdots + 10.9763u - 1.85015\end{pmatrix}$$
$$a_9 = \begin{pmatrix}1.14775u^{44} - 8.03211u^{43} + \cdots - 29.6955u + 4.33683\\-0.0391055u^{44} + 0.648251u^{43} + \cdots + 12.0682u - 1.19731\end{pmatrix}$$
$$a_4 = \begin{pmatrix}u^4+u^2+1\\u^6+2u^4+u^2\end{pmatrix}$$
$$a_8 = \begin{pmatrix}1.14775u^{44} - 8.03211u^{43} + \cdots - 29.6955u + 4.33683\\0.256025u^{44} - 1.48232u^{43} + \cdots + 10.9482u - 1.19944\end{pmatrix}$$
$$a_7 = \begin{pmatrix}-u^2-1\\\frac{1}{16}u^{43} - \frac{3}{8}u^{42} + \cdots + \frac{11}{4}u - \frac{1}{16}\end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes
$= \frac{60972380652257}{57194726799376}u^{44} - \frac{218749636382387}{28597363399688}u^{43} + \cdots + \frac{1862967060953113}{57194726799376}u - \frac{208231471984261}{28597363399688}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{45} + 29u^{44} + \cdots + 23u - 1$
c_2, c_5	$u^{45} + 7u^{44} + \cdots + 13u + 1$
c_3	$u^{45} - 7u^{44} + \cdots + 3u + 1$
c_4, c_8	$u^{45} + 2u^{44} + \cdots + 3072u^2 - 1024$
c_6	$u^{45} - 4u^{44} + \cdots + 2u - 1$
c_7, c_{11}	$u^{45} - 3u^{44} + \cdots + 32u - 32$
c_9, c_{10}, c_{12}	$u^{45} - 8u^{44} + \cdots - 8u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{45} - 19y^{44} + \cdots + 3799y - 1$
c_2, c_5	$y^{45} + 29y^{44} + \cdots + 23y - 1$
c_3	$y^{45} - 67y^{44} + \cdots + 23y - 1$
c_4, c_8	$y^{45} - 60y^{44} + \cdots + 6291456y - 1048576$
c_6	$y^{45} - 62y^{44} + \cdots + 14y - 1$
c_7, c_{11}	$y^{45} + 39y^{44} + \cdots - 4608y - 1024$
c_9, c_{10}, c_{12}	$y^{45} - 50y^{44} + \cdots + 70y^2 - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.448428+0.886782I$ $a=3.29054-2.26057I$ $b=-0.04313-3.34261I$	$-1.93664-1.84719I$	$16.6318+21.5784I$
$u=-0.448428-0.886782I$ $a=3.29054+2.26057I$ $b=-0.04313+3.34261I$	$-1.93664+1.84719I$	$16.6318-21.5784I$
$u=1.028510+0.052980I$ $a=0.875035-0.619833I$ $b=0.792997+0.140103I$	$-8.08739-3.08320I$	$-6.91743+2.52914I$
$u=1.028510-0.052980I$ $a=0.875035+0.619833I$ $b=0.792997-0.140103I$	$-8.08739+3.08320I$	$-6.91743-2.52914I$
$u=0.141103+1.020830I$ $a=0.123326-0.575048I$ $b=-0.602098-0.954633I$	$-1.88299+2.68710I$	$-8.64703-3.04236I$
$u=0.141103-1.020830I$ $a=0.123326+0.575048I$ $b=-0.602098+0.954633I$	$-1.88299-2.68710I$	$-8.64703+3.04236I$
$u=1.04389$ $a=3.48098$ $b=2.56398$	-10.3675	-7.74840
$u=-0.814101+0.473442I$ $a=-1.85931-0.05637I$ $b=-1.69396+0.05742I$	$-6.36217-1.58930I$	$-8.13248+2.19731I$
$u=-0.814101-0.473442I$ $a=-1.85931+0.05637I$ $b=-1.69396-0.05742I$	$-6.36217+1.58930I$	$-8.13248-2.19731I$
$u=0.321638+1.027370I$ $a=-0.357029-0.516807I$ $b=0.721264+1.082480I$	$-6.92269+6.44252I$	$-13.9889-5.4327I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.321638 - 1.027370I$ $a = -0.357029 + 0.516807I$ $b = 0.721264 - 1.082480I$	$-6.92269 - 6.44252I$	$-13.9889 + 5.4327I$
$u = 1.074090 + 0.154235I$ $a = -2.72392 + 0.96068I$ $b = -2.30814 + 0.29423I$	$-15.4421 - 7.7641I$	$-8.55026 + 3.19844I$
$u = 1.074090 - 0.154235I$ $a = -2.72392 - 0.96068I$ $b = -2.30814 - 0.29423I$	$-15.4421 + 7.7641I$	$-8.55026 - 3.19844I$
$u = -0.558842 + 0.933277I$ $a = -1.240750 - 0.138767I$ $b = -0.96715 + 1.42473I$	$-0.77833 - 2.85163I$	$-9.27214 + 0.I$
$u = -0.558842 - 0.933277I$ $a = -1.240750 + 0.138767I$ $b = -0.96715 - 1.42473I$	$-0.77833 + 2.85163I$	$-9.27214 + 0.I$
$u = 0.038638 + 1.093140I$ $a = 0.764813 - 0.243323I$ $b = -1.73664 - 1.54360I$	$-4.80137 + 0.66249I$	$-10.84717 + 0.I$
$u = 0.038638 - 1.093140I$ $a = 0.764813 + 0.243323I$ $b = -1.73664 + 1.54360I$	$-4.80137 - 0.66249I$	$-10.84717 + 0.I$
$u = -0.095599 + 1.102010I$ $a = 0.691464 + 0.377467I$ $b = -0.104979 + 0.147687I$	$-3.59727 - 1.96898I$	$-11.38503 + 2.89411I$
$u = -0.095599 - 1.102010I$ $a = 0.691464 - 0.377467I$ $b = -0.104979 - 0.147687I$	$-3.59727 + 1.96898I$	$-11.38503 - 2.89411I$
$u = -0.464257 + 0.743525I$ $a = -0.128607 + 0.894701I$ $b = 0.879012 + 0.408581I$	$-0.10245 - 1.42024I$	$-3.50008 + 5.75375I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.464257-0.743525I$ $a=-0.128607-0.894701I$ $b=\ \ 0.879012-0.408581I$	$-0.10245+1.42024I$	$-3.50008-5.75375I$
$u=\ \ 0.840032$ $a=-1.01212$ $b=-0.718511$	-3.18298	0.134470
$u=-0.209858+0.761572I$ $a=-0.588066+0.563430I$ $b=\ \ 0.557407+0.666651I$	$-0.270200-1.317790I$	$-2.14262+3.99951I$
$u=-0.209858-0.761572I$ $a=-0.588066-0.563430I$ $b=\ \ 0.557407-0.666651I$	$-0.270200+1.317790I$	$-2.14262-3.99951I$
$u=-0.715937+1.055430I$ $a=\ \ 0.47884+1.81232I$ $b=\ \ 1.310670+0.236185I$	$-7.98005-4.06553I$	0
$u=-0.715937-1.055430I$ $a=\ \ 0.47884-1.81232I$ $b=\ \ 1.310670-0.236185I$	$-7.98005+4.06553I$	0
$u=\ \ 0.414289+0.552563I$ $a=-0.545658-0.831909I$ $b=-0.997622+0.175155I$	$-5.50892-3.28114I$	$-8.73853+6.07709I$
$u=\ \ 0.414289-0.552563I$ $a=-0.545658+0.831909I$ $b=-0.997622-0.175155I$	$-5.50892+3.28114I$	$-8.73853-6.07709I$
$u=\ \ 0.456920+1.233790I$ $a=\ \ 0.146367-0.696106I$ $b=\ \ 0.998812-0.254559I$	$-6.87697+4.62897I$	0
$u=\ \ 0.456920-1.233790I$ $a=\ \ 0.146367+0.696106I$ $b=\ \ 0.998812+0.254559I$	$-6.87697-4.62897I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.236201 + 1.315500I$ $a = 0.223845 + 0.997497I$ $b = 2.56560 + 0.53987I$	$-11.96940 - 4.68670I$	0
$u = -0.236201 - 1.315500I$ $a = 0.223845 - 0.997497I$ $b = 2.56560 - 0.53987I$	$-11.96940 + 4.68670I$	0
$u = 0.53792 + 1.32330I$ $a = -0.520780 + 0.416398I$ $b = -1.64420 + 0.02216I$	$-12.0273 + 8.6721I$	0
$u = 0.53792 - 1.32330I$ $a = -0.520780 - 0.416398I$ $b = -1.64420 - 0.02216I$	$-12.0273 - 8.6721I$	0
$u = 0.47555 + 1.35442I$ $a = 0.116010 + 0.860979I$ $b = -0.012680 + 0.444909I$	$-12.52320 + 2.24438I$	0
$u = 0.47555 - 1.35442I$ $a = 0.116010 - 0.860979I$ $b = -0.012680 - 0.444909I$	$-12.52320 - 2.24438I$	0
$u = 0.60027 + 1.30875I$ $a = 1.41525 - 1.67542I$ $b = 3.06355 - 0.12659I$	$-19.0180 + 13.7371I$	0
$u = 0.60027 - 1.30875I$ $a = 1.41525 + 1.67542I$ $b = 3.06355 + 0.12659I$	$-19.0180 - 13.7371I$	0
$u = 0.51317 + 1.34856I$ $a = -0.98613 + 2.21993I$ $b = -3.05558 + 1.18362I$	$-14.5875 + 5.5390I$	0
$u = 0.51317 - 1.34856I$ $a = -0.98613 - 2.21993I$ $b = -3.05558 - 1.18362I$	$-14.5875 - 5.5390I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.40664 + 1.42221I$ $a = 0.22163 - 1.91263I$ $b = 1.91377 - 1.51963I$	$18.8970 - 2.5007I$	0
$u = 0.40664 - 1.42221I$ $a = 0.22163 + 1.91263I$ $b = 1.91377 + 1.51963I$	$18.8970 + 2.5007I$	0
$u = 0.027627 + 0.285904I$ $a = -1.54121 + 0.47713I$ $b = 0.419324 + 0.349696I$	$-0.299097 - 1.132870I$	$-4.25483 + 6.05161I$
$u = 0.027627 - 0.285904I$ $a = -1.54121 - 0.47713I$ $b = 0.419324 - 0.349696I$	$-0.299097 + 1.132870I$	$-4.25483 - 6.05161I$
$u = 0.129774$ $a = -5.18021$ $b = 1.04208$	-2.19508	-3.54080

II. $I_2^u = \langle -4a^4u-2a^3u+\cdots+15a^2-3,\ a^5+4a^3u+4a^3-5a^2-2au+u+1,\ u^2+u+1\rangle$

(i) Arc colorings

$$a_3 = \begin{pmatrix}1\\0\end{pmatrix}$$
$$a_5 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_2 = \begin{pmatrix}1\\-u-1\end{pmatrix}$$
$$a_6 = \begin{pmatrix}u\\u+1\end{pmatrix}$$
$$a_1 = \begin{pmatrix}-u\\-u-1\end{pmatrix}$$
$$a_{10} = \begin{pmatrix}a\\\frac{4}{5}a^4u+\frac{2}{5}a^3u+\cdots-3a^2+\frac{3}{5}\end{pmatrix}$$
$$a_{11} = \begin{pmatrix}-\frac{4}{5}a^4+\frac{2}{5}a^3u-3a^2u-3a^2+3a+\frac{3}{5}u\\\frac{8}{5}a^4u+\frac{4}{5}a^3u+\cdots-6a^2+\frac{6}{5}\end{pmatrix}$$
$$a_{12} = \begin{pmatrix}-\frac{2}{5}a^4+\frac{1}{5}a^3u-2a^2u-2a^2+a-\frac{1}{5}u\\-\frac{1}{5}a^4u-\frac{3}{5}a^3u+\cdots-\frac{3}{5}a^3-\frac{2}{5}\end{pmatrix}$$
$$a_9 = \begin{pmatrix}0\\-\frac{1}{5}a^4u-\frac{3}{5}a^3u+\cdots-\frac{3}{5}a^3-\frac{2}{5}\end{pmatrix}$$
$$a_4 = \begin{pmatrix}0\\u\end{pmatrix}$$
$$a_8 = \begin{pmatrix}0\\-\frac{1}{5}a^4u-\frac{3}{5}a^3u+\cdots-\frac{3}{5}a^3-\frac{2}{5}\end{pmatrix}$$
$$a_7 = \begin{pmatrix}u\\-\frac{2}{5}a^4u-\frac{6}{5}a^3u+\cdots-\frac{6}{5}a^3+\frac{6}{5}\end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= -\frac{14}{5}a^4u-3a^4-\frac{7}{5}a^3u-\frac{2}{5}a^3-15a^2u-3a^2+11au+16a+\frac{27}{5}u-\frac{33}{5}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.500000+0.866025I$ $a=\ \ 1.012010-0.734701I$ $b=\ \ 0.768927-0.124653I$	$-5.87256+2.37095I$	$-11.57979+0.88917I$
$u=-0.500000+0.866025I$ $a=\ \ 0.130268-1.243770I$ $b=-0.492416+0.603584I$	$-5.87256-6.43072I$	$-6.27578+5.55522I$
$u=-0.500000+0.866025I$ $a=-0.364485-0.347423I$ $b=-1.114310+0.148503I$	$-0.329100-0.499304I$	$-6.44749-1.44665I$
$u=-0.500000+0.866025I$ $a=\ \ 0.483119+0.141942I$ $b=\ \ 0.685764-0.890773I$	$-0.32910-3.56046I$	$-2.59686+8.38554I$
$u=-0.500000+0.866025I$ $a=-1.26091+2.18395I$ $b=\ \ 0.652039+1.129360I$	$-2.40108-2.02988I$	$-7.10008+5.66929I$
$u=-0.500000-0.866025I$ $a=\ \ 1.012010+0.734701I$ $b=\ \ 0.768927+0.124653I$	$-5.87256-2.37095I$	$-11.57979-0.88917I$
$u=-0.500000-0.866025I$ $a=\ \ 0.130268+1.243770I$ $b=-0.492416-0.603584I$	$-5.87256+6.43072I$	$-6.27578-5.55522I$
$u=-0.500000-0.866025I$ $a=-0.364485+0.347423I$ $b=-1.114310-0.148503I$	$-0.329100+0.499304I$	$-6.44749+1.44665I$
$u=-0.500000-0.866025I$ $a=\ \ 0.483119-0.141942I$ $b=\ \ 0.685764+0.890773I$	$-0.32910+3.56046I$	$-2.59686-8.38554I$
$u=-0.500000-0.866025I$ $a=-1.26091-2.18395I$ $b=\ \ 0.652039-1.129360I$	$-2.40108+2.02988I$	$-7.10008-5.66929I$

III. $\boldsymbol{I_3^u = \langle u^2 + b - u + 1,\ -u^4 + u^3 - u^2 + a + 1,\ u^5 - u^4 + 2u^3 - u^2 + u - 1\rangle}$

(i) Arc colorings

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

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

$$a_2 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} u \\ u^3 + u \end{pmatrix}$$

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

$$a_{10} = \begin{pmatrix} u^4 - u^3 + u^2 - 1 \\ -u^2 + u - 1 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} u^4 - u^3 + 2u^2 \\ u - 1 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} u^4 - u^3 + 2u^2 \\ u - 1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^2 - 1 \\ -u^2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^4 + u^2 + 1 \\ u^4 - u^3 + u^2 + 1 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^2 - 1 \\ u^4 \end{pmatrix}$$

$$a_7 = \begin{pmatrix} -u^2 - 1 \\ u^4 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -3u^4 + 5u^3 - 4u^2 - 9$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1$
c_2, c_5	$y^5 + 3y^4 + 4y^3 + y^2 - y - 1$
c_3, c_4, c_8	$y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1$
c_6	$y^5 - 9y^4 + 32y^3 - 35y^2 - 5y - 1$
c_7, c_{11}	y^5
c_9, c_{10}, c_{12}	$(y-1)^5$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.339110+0.822375I$ $a=-2.20635+0.34085I$ $b=-0.77780+1.38013I$	$-1.97403-1.53058I$	$-3.52158-1.00973I$
$u=-0.339110-0.822375I$ $a=-2.20635-0.34085I$ $b=-0.77780-1.38013I$	$-1.97403+1.53058I$	$-3.52158+1.00973I$
$u=\ \ 0.766826$ $a=-0.517119$ $b=-0.821196$	-4.04602	-10.1350
$u=\ \ 0.455697+1.200150I$ $a=-0.035087-0.621896I$ $b=\ \ 0.688402+0.106340I$	$-7.51750+4.40083I$	$-14.4110-1.1901I$
$u=\ \ 0.455697-1.200150I$ $a=-0.035087+0.621896I$ $b=\ \ 0.688402-0.106340I$	$-7.51750-4.40083I$	$-14.4110+1.1901I$

IV. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2-u+1)^5)(u^5-3u^4+\cdots-u+1)(u^{45}+29u^{44}+\cdots+23u-1)$
c_2	$((u^2+u+1)^5)(u^5-u^4+\cdots+u-1)(u^{45}+7u^{44}+\cdots+13u+1)$
c_3	$((u^2-u+1)^5)(u^5+u^4+\cdots+u-1)(u^{45}-7u^{44}+\cdots+3u+1)$
c_4	$u^{10}(u^5+u^4+\cdots+u-1)(u^{45}+2u^{44}+\cdots+3072u^2-1024)$
c_5	$((u^2-u+1)^5)(u^5+u^4+\cdots+u+1)(u^{45}+7u^{44}+\cdots+13u+1)$
c_6	$(u^5-5u^4+8u^3-3u^2-u-1)(u^5-3u^4+4u^3-u^2-u+1)^2$ $\cdot(u^{45}-4u^{44}+\cdots+2u-1)$
c_7	$u^5(u^5-u^4+\cdots+u-1)^2(u^{45}-3u^{44}+\cdots+32u-32)$
c_8	$u^{10}(u^5-u^4+\cdots+u+1)(u^{45}+2u^{44}+\cdots+3072u^2-1024)$
c_9, c_{10}	$((u-1)^5)(u^5+u^4+\cdots+u-1)^2(u^{45}-8u^{44}+\cdots-8u-1)$
c_{11}	$u^5(u^5+u^4+\cdots+u+1)^2(u^{45}-3u^{44}+\cdots+32u-32)$
c_{12}	$((u+1)^5)(u^5-u^4+\cdots+u+1)^2(u^{45}-8u^{44}+\cdots-8u-1)$

V. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^2+y+1)^5(y^5-y^4+8y^3-3y^2+3y-1)$ $\cdot(y^{45}-19y^{44}+\cdots+3799y-1)$
c_2, c_5	$((y^2+y+1)^5)(y^5+3y^4+\cdots-y-1)(y^{45}+29y^{44}+\cdots+23y-1)$
c_3	$(y^2+y+1)^5(y^5-5y^4+8y^3-3y^2-y-1)$ $\cdot(y^{45}-67y^{44}+\cdots+23y-1)$
c_4, c_8	$y^{10}(y^5-5y^4+8y^3-3y^2-y-1)$ $\cdot(y^{45}-60y^{44}+\cdots+6291456y-1048576)$
c_6	$(y^5-9y^4+32y^3-35y^2-5y-1)(y^5-y^4+8y^3-3y^2+3y-1)^2$ $\cdot(y^{45}-62y^{44}+\cdots+14y-1)$
c_7, c_{11}	$y^5(y^5+3y^4+\cdots-y-1)^2(y^{45}+39y^{44}+\cdots-4608y-1024)$
c_9, c_{10}, c_{12}	$((y-1)^5)(y^5-5y^4+\cdots-y-1)^2(y^{45}-50y^{44}+\cdots+70y^2-1)$