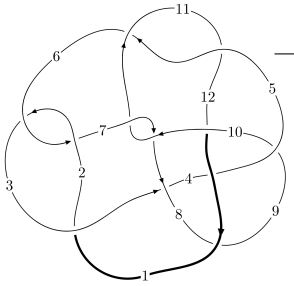
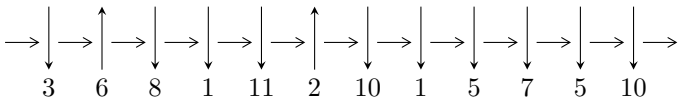
$12n_{0361}$ $(K12n_{0361})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -8.05168 \times 10^{34} u^{53} + 1.07637 \times 10^{35} u^{52} + \cdots + 6.87463 \times 10^{34} b - 6.05852 \times 10^{33},$$
$$1.46995 \times 10^{35} u^{53} - 2.86110 \times 10^{35} u^{52} + \cdots + 6.87463 \times 10^{34} a + 1.14483 \times 10^{36},\ u^{54} - 2u^{53} + \cdots + 7u + 1 \rangle$$
$$I_2^u = \langle -u^{17} - 2u^{16} + \cdots + b - 2,\ -2u^{17} - u^{16} + \cdots + a - 2u,\ u^{18} + u^{17} + \cdots + u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 72 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.

$\boldsymbol{I_1^u = \langle -8.05\times 10^{34}u^{53}+1.08\times 10^{35}u^{52}+\cdots+6.87\times 10^{34}b-6.06\times 10^{33},\ 1.47\times 10^{35}u^{53}-2.86\times 10^{35}u^{52}+\cdots+6.87\times 10^{34}a+1.14\times 10^{36},\ u^{54}-2u^{53}+\cdots+7u+1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} u \\ u^3+u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5+u^3+u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} -2.13823u^{53}+4.16183u^{52}+\cdots+32.8959u-16.6530 \\ 1.17122u^{53}-1.56572u^{52}+\cdots-4.86988u+0.0881286 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 1.09873u^{53}-2.43744u^{52}+\cdots-25.3391u+18.7511 \\ -0.466742u^{53}+0.548863u^{52}+\cdots+1.52955u-0.570206 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.26181u^{53}-2.68085u^{52}+\cdots-26.6668u+18.5566 \\ -0.318054u^{53}+0.489820u^{52}+\cdots+3.00911u-0.691152 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -0.967010u^{53}+2.59611u^{52}+\cdots+28.0260u-16.5649 \\ 1.17122u^{53}-1.56572u^{52}+\cdots-4.86988u+0.0881286 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -1.33496u^{53}+2.06007u^{52}+\cdots+16.5981u-12.0861 \\ -0.518639u^{53}+0.583965u^{52}+\cdots+0.382552u+0.726746 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.951780u^{53}+1.73096u^{52}+\cdots+16.4888u-12.1502 \\ -0.301232u^{53}+0.483930u^{52}+\cdots+1.35754u+0.613972 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -3.98736u^{53}+8.09125u^{52}+\cdots+69.3422u-34.0361 \\ -0.388553u^{53}+0.437828u^{52}+\cdots+1.16197u+1.80831 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2.52952u^{53}+4.81017u^{52}+\cdots+32.1330u-13.0471$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{54}+20u^{53}+\cdots-87u+1$
c_2, c_6	$u^{54}-2u^{53}+\cdots+7u+1$
c_3, c_9	$u^{54}-u^{53}+\cdots+10u-1$
c_4	$u^{54}-3u^{53}+\cdots+16u+1$
c_5, c_{11}	$u^{54}+u^{53}+\cdots-200u-449$
c_7, c_{10}	$u^{54}-5u^{53}+\cdots+436u-41$
c_8	$u^{54}+3u^{53}+\cdots-50452u-32411$
c_{12}	$u^{54}-5u^{53}+\cdots-22095u+889$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{54} + 36y^{53} + \cdots - 6711y + 1$
c_2, c_6	$y^{54} + 20y^{53} + \cdots - 87y + 1$
c_3, c_9	$y^{54} - 67y^{53} + \cdots - 88y + 1$
c_4	$y^{54} - 93y^{53} + \cdots - 30y + 1$
c_5, c_{11}	$y^{54} + 25y^{53} + \cdots + 1723672y + 201601$
c_7, c_{10}	$y^{54} + 25y^{53} + \cdots - 41512y + 1681$
c_8	$y^{54} - 65y^{53} + \cdots - 8887523962y + 1050472921$
c_{12}	$y^{54} - 73y^{53} + \cdots - 593861y + 790321$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.782221+0.634653I$ $a=-0.195755+0.247117I$ $b=-0.41123+1.41581I$	$4.48864+3.39067I$	$-4.34936-2.94495I$
$u=-0.782221-0.634653I$ $a=-0.195755-0.247117I$ $b=-0.41123-1.41581I$	$4.48864-3.39067I$	$-4.34936+2.94495I$
$u=-0.977318+0.276740I$ $a=-0.0878048-0.0221906I$ $b=\ \ 0.424255+0.996657I$	$-5.26391-2.95255I$	$-5.80358+3.54585I$
$u=-0.977318-0.276740I$ $a=-0.0878048+0.0221906I$ $b=\ \ 0.424255-0.996657I$	$-5.26391+2.95255I$	$-5.80358-3.54585I$
$u=\ \ 0.624202+0.755472I$ $a=\ \ 0.453136+0.731003I$ $b=-0.108485+1.364720I$	$3.16221+2.63478I$	$-6.89633-3.54122I$
$u=\ \ 0.624202-0.755472I$ $a=\ \ 0.453136-0.731003I$ $b=-0.108485-1.364720I$	$3.16221-2.63478I$	$-6.89633+3.54122I$
$u=\ \ 0.775989+0.663204I$ $a=-1.14721-1.07182I$ $b=\ \ 1.33969-0.51090I$	$-5.82772-0.87480I$	$-6.95939-0.10046I$
$u=\ \ 0.775989-0.663204I$ $a=-1.14721+1.07182I$ $b=\ \ 1.33969+0.51090I$	$-5.82772+0.87480I$	$-6.95939+0.10046I$
$u=-0.716852+0.650173I$ $a=\ \ 1.11464-1.50236I$ $b=\ \ 0.267394-0.730103I$	$-6.42976+0.18074I$	$-5.35993-0.34747I$
$u=-0.716852-0.650173I$ $a=\ \ 1.11464+1.50236I$ $b=\ \ 0.267394+0.730103I$	$-6.42976-0.18074I$	$-5.35993+0.34747I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.594108+0.867348I$ $a=\ \ 1.02463-1.10108I$ $b=-1.340650+0.132088I$	$-1.16353-2.34293I$	$-3.59630+5.63955I$
$u=-0.594108-0.867348I$ $a=\ \ 1.02463+1.10108I$ $b=-1.340650-0.132088I$	$-1.16353+2.34293I$	$-3.59630-5.63955I$
$u=\ \ 0.010981+1.054630I$ $a=\ \ 0.72169-1.40947I$ $b=-0.409945+1.038840I$	$-1.20571+2.80469I$	$-12.64158-4.77437I$
$u=\ \ 0.010981-1.054630I$ $a=\ \ 0.72169+1.40947I$ $b=-0.409945-1.038840I$	$-1.20571-2.80469I$	$-12.64158+4.77437I$
$u=-0.026887+1.056610I$ $a=-1.86596+0.02219I$ $b=\ \ 0.945058-0.845598I$	$-11.48580-0.47734I$	$-13.44450+0.I$
$u=-0.026887-1.056610I$ $a=-1.86596-0.02219I$ $b=\ \ 0.945058+0.845598I$	$-11.48580+0.47734I$	$-13.44450+0.I$
$u=\ \ 0.238163+1.041600I$ $a=-0.453012+1.312980I$ $b=-0.151747-0.544879I$	$-0.264943+0.782686I$	$-8.72185+0.87919I$
$u=\ \ 0.238163-1.041600I$ $a=-0.453012-1.312980I$ $b=-0.151747+0.544879I$	$-0.264943-0.782686I$	$-8.72185-0.87919I$
$u=-0.213122+0.886225I$ $a=\ \ 1.87729-0.42780I$ $b=-0.854175-0.507735I$	$-2.99097-1.86676I$	$-15.5248+2.2145I$
$u=-0.213122-0.886225I$ $a=\ \ 1.87729+0.42780I$ $b=-0.854175+0.507735I$	$-2.99097+1.86676I$	$-15.5248-2.2145I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.554630 + 0.711383I$ $a = 0.666586 + 0.663185I$ $b = -0.632614 - 1.163320I$	$2.75948 - 0.58527I$	$-6.51121 - 1.30492I$
$u = 0.554630 - 0.711383I$ $a = 0.666586 - 0.663185I$ $b = -0.632614 + 1.163320I$	$2.75948 + 0.58527I$	$-6.51121 + 1.30492I$
$u = 0.642108 + 0.935178I$ $a = -1.63379 - 0.11874I$ $b = 0.101662 - 1.230990I$	$2.59369 + 2.34772I$	$-8.00000 + 0.I$
$u = 0.642108 - 0.935178I$ $a = -1.63379 + 0.11874I$ $b = 0.101662 + 1.230990I$	$2.59369 - 2.34772I$	$-8.00000 + 0.I$
$u = 0.957330 + 0.627734I$ $a = -0.0824892 - 0.0033199I$ $b = 0.73765 + 1.30778I$	$-2.98894 - 8.13870I$	$-8.00000 + 3.35962I$
$u = 0.957330 - 0.627734I$ $a = -0.0824892 + 0.0033199I$ $b = 0.73765 - 1.30778I$	$-2.98894 + 8.13870I$	$-8.00000 - 3.35962I$
$u = 0.588547 + 0.982520I$ $a = 1.96371 - 0.17505I$ $b = -0.758072 + 0.897967I$	$1.85903 + 5.19987I$	$-8.00000 - 5.59193I$
$u = 0.588547 - 0.982520I$ $a = 1.96371 + 0.17505I$ $b = -0.758072 - 0.897967I$	$1.85903 - 5.19987I$	$-8.00000 + 5.59193I$
$u = 0.276388 + 0.802714I$ $a = -0.813277 - 0.007279I$ $b = 0.173039 + 0.072417I$	$-0.465364 + 1.306920I$	$-5.27166 - 4.29457I$
$u = 0.276388 - 0.802714I$ $a = -0.813277 + 0.007279I$ $b = 0.173039 - 0.072417I$	$-0.465364 - 1.306920I$	$-5.27166 + 4.29457I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.838110+0.796599I$ $a=-0.256450+0.157165I$ $b=\ \ 0.516019-1.021330I$	$6.91184-0.61269I$	0
$u=-0.838110-0.796599I$ $a=-0.256450-0.157165I$ $b=\ \ 0.516019+1.021330I$	$6.91184+0.61269I$	0
$u=-0.663079+1.010530I$ $a=-0.785137+1.170500I$ $b=\ \ 0.347854+1.011880I$	$-7.52025-5.50179I$	0
$u=-0.663079-1.010530I$ $a=-0.785137-1.170500I$ $b=\ \ 0.347854-1.011880I$	$-7.52025+5.50179I$	0
$u=\ \ 0.846451+0.872894I$ $a=-0.251748-0.075444I$ $b=-0.431221-0.973967I$	$3.50126+0.93079I$	0
$u=\ \ 0.846451-0.872894I$ $a=-0.251748+0.075444I$ $b=-0.431221+0.973967I$	$3.50126-0.93079I$	0
$u=\ \ 0.691798+1.020090I$ $a=-0.736000-1.034630I$ $b=\ \ 1.40572+0.65983I$	$-6.91490+6.44905I$	0
$u=\ \ 0.691798-1.020090I$ $a=-0.736000+1.034630I$ $b=\ \ 1.40572-0.65983I$	$-6.91490-6.44905I$	0
$u=-0.685621+1.030320I$ $a=\ \ 1.85848-0.20635I$ $b=-0.56316-1.42285I$	$3.29320-8.95161I$	0
$u=-0.685621-1.030320I$ $a=\ \ 1.85848+0.20635I$ $b=-0.56316+1.42285I$	$3.29320+8.95161I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.814791 + 0.938243I$ $a = 1.082890 + 0.699947I$ $b = -0.565715 + 0.957837I$	$3.28563 + 5.26424I$	0
$u = 0.814791 - 0.938243I$ $a = 1.082890 - 0.699947I$ $b = -0.565715 - 0.957837I$	$3.28563 - 5.26424I$	0
$u = -0.783368 + 0.973705I$ $a = -1.53300 + 0.36496I$ $b = 0.642887 + 0.900173I$	$6.36672 - 5.44538I$	0
$u = -0.783368 - 0.973705I$ $a = -1.53300 - 0.36496I$ $b = 0.642887 - 0.900173I$	$6.36672 + 5.44538I$	0
$u = -0.169579 + 1.266130I$ $a = -1.24464 - 0.96277I$ $b = 0.714749 + 0.999139I$	$-10.81370 - 6.61602I$	0
$u = -0.169579 - 1.266130I$ $a = -1.24464 + 0.96277I$ $b = 0.714749 - 0.999139I$	$-10.81370 + 6.61602I$	0
$u = 0.753233 + 1.099800I$ $a = -1.82443 - 0.33859I$ $b = 0.84183 - 1.33565I$	$-4.4657 + 14.4090I$	0
$u = 0.753233 - 1.099800I$ $a = -1.82443 + 0.33859I$ $b = 0.84183 + 1.33565I$	$-4.4657 - 14.4090I$	0
$u = -0.564814 + 1.229530I$ $a = 0.345121 + 0.886401I$ $b = 0.335671 - 0.800648I$	$-8.30076 - 2.64729I$	0
$u = -0.564814 - 1.229530I$ $a = 0.345121 - 0.886401I$ $b = 0.335671 + 0.800648I$	$-8.30076 + 2.64729I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = \quad 0.444579 + 0.121551I$ $a = -0.860489 + 0.135214I$ $b = -0.187796 + 1.115610I$	$2.66689 + 1.69511I$	$-1.25940 - 4.46780I$
$u = \quad 0.444579 - 0.121551I$ $a = -0.860489 - 0.135214I$ $b = -0.187796 - 1.115610I$	$2.66689 - 1.69511I$	$-1.25940 + 4.46780I$
$u = -0.297162$ $a = -0.983290$ $b = -0.513330$	-0.837204	-11.6370
$u = -0.111060$ $a = -19.6906$ $b = \quad 0.755994$	-7.69304	-16.8530

II.

$\boldsymbol{I_2^u = \langle -u^{17}-2u^{16}+\cdots+b-2,\ -2u^{17}-u^{16}+\cdots+a-2u,\ u^{18}+u^{17}+\cdots+u+1\rangle}$

(i) Arc colorings

$$a_2 = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_3 = \begin{pmatrix} u \\ u^3+u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^3 \\ u^5+u^3+u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 2u^{17}+u^{16}+\cdots+7u^2+2u \\ u^{17}+2u^{16}+\cdots+4u+2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u^{16}+u^{15}+\cdots+6u+1 \\ -u^{17}-u^{16}+\cdots-u+2 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} u^{15}+3u^{13}+8u^{11}+13u^9+17u^7-u^6+16u^5+11u^3-2u^2+6u \\ -u^{17}-u^{16}+\cdots+u^2+2 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 3u^{17}+3u^{16}+\cdots+6u+2 \\ u^{17}+2u^{16}+\cdots+4u+2 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} -u^{16}-u^{15}+\cdots-3u-4 \\ 2u^{17}+2u^{16}+\cdots+4u-1 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -u^{16}-u^{15}+\cdots-3u-4 \\ 2u^{17}+2u^{16}+\cdots+6u^2+4u \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} u^{17}+u^{16}+\cdots-u+5 \\ -u^{17}-u^{16}+\cdots-4u-1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= u^{17}+2u^{16}+4u^{15}+7u^{14}+11u^{13}+19u^{12}+22u^{11}+31u^{10}+32u^9+40u^8+38u^7+34u^6+33u^5+19u^4+21u^3+2u^2+8u-12$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{18} - 7u^{17} + \cdots - 11u + 1$
c_2	$u^{18} - u^{17} + \cdots - u + 1$
c_3	$u^{18} - 10u^{16} + \cdots - 4u + 1$
c_4	$u^{18} + 4u^{17} + \cdots + 10u + 1$
c_5	$u^{18} + 6u^{16} + \cdots + 4u + 1$
c_6	$u^{18} + u^{17} + \cdots + u + 1$
c_7	$u^{18} - 4u^{17} + \cdots + 2u + 1$
c_8	$u^{18} + 2u^{17} + \cdots - 4u + 1$
c_9	$u^{18} - 10u^{16} + \cdots + 4u + 1$
c_{10}	$u^{18} + 4u^{17} + \cdots - 2u + 1$
c_{11}	$u^{18} + 6u^{16} + \cdots - 4u + 1$
c_{12}	$u^{18} + 6u^{17} + \cdots + 3u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{18} + 15y^{17} + \cdots - 9y + 1$
c_2, c_6	$y^{18} + 7y^{17} + \cdots + 11y + 1$
c_3, c_9	$y^{18} - 20y^{17} + \cdots - 2y + 1$
c_4	$y^{18} - 6y^{17} + \cdots + 16y + 1$
c_5, c_{11}	$y^{18} + 12y^{17} + \cdots + 14y + 1$
c_7, c_{10}	$y^{18} + 8y^{17} + \cdots - 6y + 1$
c_8	$y^{18} - 6y^{17} + \cdots + 8y + 1$
c_{12}	$y^{18} - 10y^{17} + \cdots + 41y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.091159 + 1.006750I$ $a = -0.59976 + 1.69234I$ $b = 0.388323 - 0.837519I$	$-0.09795 + 2.04194I$	$-8.19600 - 3.28582I$
$u = 0.091159 - 1.006750I$ $a = -0.59976 - 1.69234I$ $b = 0.388323 + 0.837519I$	$-0.09795 - 2.04194I$	$-8.19600 + 3.28582I$
$u = 0.428224 + 0.818772I$ $a = -1.047530 - 0.864539I$ $b = 0.969311 - 0.074817I$	$-1.77131 + 1.77665I$	$-11.30886 - 0.92535I$
$u = 0.428224 - 0.818772I$ $a = -1.047530 + 0.864539I$ $b = 0.969311 + 0.074817I$	$-1.77131 - 1.77665I$	$-11.30886 + 0.92535I$
$u = 0.809863 + 0.775804I$ $a = 0.085335 - 0.361987I$ $b = -0.063154 - 1.130870I$	$5.17943 + 2.43180I$	$-3.07617 - 3.07688I$
$u = 0.809863 - 0.775804I$ $a = 0.085335 + 0.361987I$ $b = -0.063154 + 1.130870I$	$5.17943 - 2.43180I$	$-3.07617 + 3.07688I$
$u = -0.818820 + 0.829999I$ $a = -0.074029 + 0.382486I$ $b = 0.79917 - 1.22352I$	$6.09112 + 0.44976I$	$-5.66829 - 1.09802I$
$u = -0.818820 - 0.829999I$ $a = -0.074029 - 0.382486I$ $b = 0.79917 + 1.22352I$	$6.09112 - 0.44976I$	$-5.66829 + 1.09802I$
$u = -0.504823 + 1.105300I$ $a = -0.154172 + 0.197850I$ $b = -0.504990 + 0.129328I$	$-9.12920 - 3.64508I$	$-11.43133 + 3.76283I$
$u = -0.504823 - 1.105300I$ $a = -0.154172 - 0.197850I$ $b = -0.504990 - 0.129328I$	$-9.12920 + 3.64508I$	$-11.43133 - 3.76283I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.785279+0.951987I$ $a=-1.67084+0.49888I$ $b=\ \ 0.87993+1.12839I$	$5.71337-6.46460I$	$-6.13451+6.89115I$
$u=-0.785279-0.951987I$ $a=-1.67084-0.49888I$ $b=\ \ 0.87993-1.12839I$	$5.71337+6.46460I$	$-6.13451-6.89115I$
$u=-0.521000+0.558610I$ $a=\ \ 0.59336-2.95727I$ $b=-0.677831-0.107119I$	$-7.27036-0.63283I$	$-11.04604+6.53524I$
$u=-0.521000-0.558610I$ $a=\ \ 0.59336+2.95727I$ $b=-0.677831+0.107119I$	$-7.27036+0.63283I$	$-11.04604-6.53524I$
$u=\ \ 0.756396+0.998306I$ $a=\ \ 1.397980+0.092696I$ $b=-0.143221+0.991419I$	$4.49100+3.47686I$	$-4.58711-2.67317I$
$u=\ \ 0.756396-0.998306I$ $a=\ \ 1.397980-0.092696I$ $b=-0.143221-0.991419I$	$4.49100-3.47686I$	$-4.58711+2.67317I$
$u=\ \ 0.044280+0.568991I$ $a=-1.53033+0.05306I$ $b=\ \ 0.352467+1.264600I$	$1.72870-1.47373I$	$-11.55167+1.90648I$
$u=\ \ 0.044280-0.568991I$ $a=-1.53033-0.05306I$ $b=\ \ 0.352467-1.264600I$	$1.72870+1.47373I$	$-11.55167-1.90648I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{18}-7u^{17}+\cdots-11u+1)(u^{54}+20u^{53}+\cdots-87u+1)$
c_2	$(u^{18}-u^{17}+\cdots-u+1)(u^{54}-2u^{53}+\cdots+7u+1)$
c_3	$(u^{18}-10u^{16}+\cdots-4u+1)(u^{54}-u^{53}+\cdots+10u-1)$
c_4	$(u^{18}+4u^{17}+\cdots+10u+1)(u^{54}-3u^{53}+\cdots+16u+1)$
c_5	$(u^{18}+6u^{16}+\cdots+4u+1)(u^{54}+u^{53}+\cdots-200u-449)$
c_6	$(u^{18}+u^{17}+\cdots+u+1)(u^{54}-2u^{53}+\cdots+7u+1)$
c_7	$(u^{18}-4u^{17}+\cdots+2u+1)(u^{54}-5u^{53}+\cdots+436u-41)$
c_8	$(u^{18}+2u^{17}+\cdots-4u+1)(u^{54}+3u^{53}+\cdots-50452u-32411)$
c_9	$(u^{18}-10u^{16}+\cdots+4u+1)(u^{54}-u^{53}+\cdots+10u-1)$
c_{10}	$(u^{18}+4u^{17}+\cdots-2u+1)(u^{54}-5u^{53}+\cdots+436u-41)$
c_{11}	$(u^{18}+6u^{16}+\cdots-4u+1)(u^{54}+u^{53}+\cdots-200u-449)$
c_{12}	$(u^{18}+6u^{17}+\cdots+3u+1)(u^{54}-5u^{53}+\cdots-22095u+889)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{18}+15y^{17}+\cdots-9y+1)(y^{54}+36y^{53}+\cdots-6711y+1)$
c_2, c_6	$(y^{18}+7y^{17}+\cdots+11y+1)(y^{54}+20y^{53}+\cdots-87y+1)$
c_3, c_9	$(y^{18}-20y^{17}+\cdots-2y+1)(y^{54}-67y^{53}+\cdots-88y+1)$
c_4	$(y^{18}-6y^{17}+\cdots+16y+1)(y^{54}-93y^{53}+\cdots-30y+1)$
c_5, c_{11}	$(y^{18}+12y^{17}+\cdots+14y+1)$ $\cdot(y^{54}+25y^{53}+\cdots+1723672y+201601)$
c_7, c_{10}	$(y^{18}+8y^{17}+\cdots-6y+1)(y^{54}+25y^{53}+\cdots-41512y+1681)$
c_8	$(y^{18}-6y^{17}+\cdots+8y+1)$ $\cdot(y^{54}-65y^{53}+\cdots-8887523962y+1050472921)$
c_{12}	$(y^{18}-10y^{17}+\cdots+41y+1)(y^{54}-73y^{53}+\cdots-593861y+790321)$