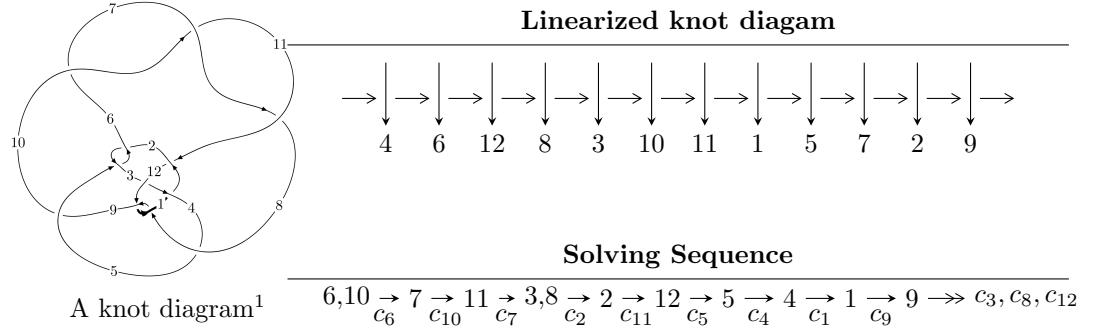


$12a_{0995}$ ($K12a_{0995}$)



Ideals for irreducible components² of X_{par}

$$\begin{aligned}
 I_1^u &= \langle -3.35632 \times 10^{467} u^{150} - 8.69041 \times 10^{467} u^{149} + \dots + 6.73414 \times 10^{467} b + 6.93806 \times 10^{467}, \\
 &\quad 2.65827 \times 10^{466} u^{150} + 7.46190 \times 10^{466} u^{149} + \dots + 3.54428 \times 10^{466} a - 1.15630 \times 10^{467}, \\
 &\quad u^{151} + 4u^{150} + \dots + 26u + 1 \rangle \\
 I_2^u &= \langle -14417596468648u^{37} - 25796321181488u^{36} + \dots + 382195085957b + 10825424312466, \\
 &\quad 14395899214974u^{37} + 25420670905160u^{36} + \dots + 382195085957a - 10347718637805, \\
 &\quad u^{38} + 3u^{37} + \dots - u - 1 \rangle
 \end{aligned}$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 189 representations.

¹The image of knot diagram is generated by the software “**Draw programme**” developed by Andrew Bartholomew(<http://www.layer8.co.uk/math/draw/index.htm#Running-draw>), where we modified some parts for our purpose(<https://github.com/CATsTAILs/LinksPainter>).

²All coefficients of polynomials are rational numbers. But the coefficients are sometimes approximated in decimal forms when there is not enough margin.

$$\text{I. } I_1^u = \langle -3.36 \times 10^{467} u^{150} - 8.69 \times 10^{467} u^{149} + \dots + 6.73 \times 10^{467} b + 6.94 \times 10^{467}, 2.66 \times 10^{466} u^{150} + 7.46 \times 10^{466} u^{149} + \dots + 3.54 \times 10^{466} a - 1.16 \times 10^{467}, u^{151} + 4u^{150} + \dots + 26u + 1 \rangle$$

(i) **Arc colorings**

$$a_6 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_3 = \begin{pmatrix} -0.750016u^{150} - 2.10533u^{149} + \dots - 84.6390u + 3.26243 \\ 0.498403u^{150} + 1.29050u^{149} + \dots + 4.04650u - 1.03028 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -0.251613u^{150} - 0.814833u^{149} + \dots - 80.5925u + 2.23215 \\ 0.498403u^{150} + 1.29050u^{149} + \dots + 4.04650u - 1.03028 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -1.81156u^{150} - 5.12541u^{149} + \dots - 73.5438u - 3.48296 \\ 0.701601u^{150} + 1.98724u^{149} + \dots + 17.9096u + 0.546640 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.762762u^{150} + 2.12787u^{149} + \dots - 20.7718u + 8.68380 \\ 0.119785u^{150} + 0.277047u^{149} + \dots - 14.1821u - 1.93078 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} 1.16708u^{150} + 3.11306u^{149} + \dots - 25.2460u + 7.13811 \\ -0.105342u^{150} - 0.345664u^{149} + \dots - 17.9438u - 2.08478 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -0.917232u^{150} - 2.79859u^{149} + \dots - 107.834u - 9.34102 \\ 0.486123u^{150} + 1.36162u^{149} + \dots + 30.0144u + 1.47747 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 1.34444u^{150} + 4.03153u^{149} + \dots + 142.105u + 3.18649 \\ -0.505240u^{150} - 1.32977u^{149} + \dots - 21.2376u - 0.205060 \end{pmatrix}$$

(ii) **Obstruction class** = -1

(iii) **Cusp Shapes** = $-1.07674u^{150} - 1.80766u^{149} + \dots + 217.448u - 18.3877$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{151} - 9u^{150} + \cdots - 6836u + 1689$
c_2, c_5	$u^{151} + 9u^{150} + \cdots - 1990u + 1825$
c_3	$u^{151} + 3u^{150} + \cdots + 1987u + 97$
c_4	$u^{151} + 6u^{150} + \cdots - 130250u + 29375$
c_6, c_7, c_{10}	$u^{151} + 4u^{150} + \cdots + 26u + 1$
c_8, c_{12}	$u^{151} + 46u^{149} + \cdots + 886u + 149$
c_9	$u^{151} - 2u^{150} + \cdots - 4383642u + 726827$
c_{11}	$u^{151} - 15u^{150} + \cdots - 31153u + 6533$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{151} + 21y^{150} + \dots - 147730430y - 2852721$
c_2, c_5	$y^{151} + 79y^{150} + \dots - 91731950y - 3330625$
c_3	$y^{151} + 33y^{150} + \dots + 3420489y - 9409$
c_4	$y^{151} + 8y^{150} + \dots - 145840000000y - 862890625$
c_6, c_7, c_{10}	$y^{151} - 146y^{150} + \dots + 122y - 1$
c_8, c_{12}	$y^{151} + 92y^{150} + \dots - 812880y - 22201$
c_9	$y^{151} + 2y^{150} + \dots + 63007761680138y - 528277487929$
c_{11}	$y^{151} - 15y^{150} + \dots - 3528388777y - 42680089$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.395913 + 0.922675I$		
$a = 0.30920 + 1.74932I$	$1.82224 + 8.97850I$	0
$b = 0.539768 - 1.161120I$		
$u = -0.395913 - 0.922675I$		
$a = 0.30920 - 1.74932I$	$1.82224 - 8.97850I$	0
$b = 0.539768 + 1.161120I$		
$u = 0.432562 + 0.907676I$		
$a = 0.58466 - 1.72016I$	$7.43003 - 3.11821I$	0
$b = 0.329417 + 1.132480I$		
$u = 0.432562 - 0.907676I$		
$a = 0.58466 + 1.72016I$	$7.43003 + 3.11821I$	0
$b = 0.329417 - 1.132480I$		
$u = 0.398506 + 0.910380I$		
$a = 0.25475 - 1.88780I$	$5.7689 - 15.1043I$	0
$b = 0.581934 + 1.258300I$		
$u = 0.398506 - 0.910380I$		
$a = 0.25475 + 1.88780I$	$5.7689 + 15.1043I$	0
$b = 0.581934 - 1.258300I$		
$u = 1.051460 + 0.031799I$		
$a = 0.572699 + 0.846716I$	$1.50497 - 3.62679I$	0
$b = -0.220280 - 1.212270I$		
$u = 1.051460 - 0.031799I$		
$a = 0.572699 - 0.846716I$	$1.50497 + 3.62679I$	0
$b = -0.220280 + 1.212270I$		
$u = -0.598347 + 0.666097I$		
$a = -0.16850 - 1.52968I$	$3.59961 + 5.85301I$	0
$b = -0.478723 + 1.274520I$		
$u = -0.598347 - 0.666097I$		
$a = -0.16850 + 1.52968I$	$3.59961 - 5.85301I$	0
$b = -0.478723 - 1.274520I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.790166 + 0.419125I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 0.923399 + 0.679091I$	$-0.026731 + 0.249329I$	0
$b = -0.172002 - 0.888623I$		
$u = -0.790166 - 0.419125I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 0.923399 - 0.679091I$	$-0.026731 - 0.249329I$	0
$b = -0.172002 + 0.888623I$		
$u = 0.862566 + 0.769640I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.658978 + 0.892280I$	$4.43962 + 9.42483I$	0
$b = 0.462248 - 1.114990I$		
$u = 0.862566 - 0.769640I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.658978 - 0.892280I$	$4.43962 - 9.42483I$	0
$b = 0.462248 + 1.114990I$		
$u = -0.899348 + 0.752807I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.450036 - 0.841376I$	$0.38102 - 3.25469I$	0
$b = 0.409776 + 1.015980I$		
$u = -0.899348 - 0.752807I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.450036 + 0.841376I$	$0.38102 + 3.25469I$	0
$b = 0.409776 - 1.015980I$		
$u = -0.285479 + 0.776322I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 1.33386 + 1.43737I$	$4.65161 - 1.17305I$	0
$b = -0.228862 - 1.046640I$		
$u = -0.285479 - 0.776322I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 1.33386 - 1.43737I$	$4.65161 + 1.17305I$	0
$b = -0.228862 + 1.046640I$		
$u = 0.466976 + 1.086610I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.05581 + 1.53114I$	$6.47214 - 4.06326I$	0
$b = -0.239066 - 1.124310I$		
$u = 0.466976 - 1.086610I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = -0.05581 - 1.53114I$	$6.47214 + 4.06326I$	0
$b = -0.239066 + 1.124310I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.467316 + 0.645610I$		
$a = 0.50155 + 1.73448I$	$-1.121110 + 0.012098I$	0
$b = 0.265133 - 0.564344I$		
$u = -0.467316 - 0.645610I$		
$a = 0.50155 - 1.73448I$	$-1.121110 - 0.012098I$	0
$b = 0.265133 + 0.564344I$		
$u = 0.639968 + 0.473480I$		
$a = -0.079364 - 0.504106I$	$2.60382 - 3.71655I$	0
$b = 0.352919 - 0.419281I$		
$u = 0.639968 - 0.473480I$		
$a = -0.079364 + 0.504106I$	$2.60382 + 3.71655I$	0
$b = 0.352919 + 0.419281I$		
$u = -0.287870 + 0.741226I$		
$a = -0.03917 - 2.02126I$	$1.57214 + 3.89522I$	0
$b = -0.524280 + 1.132570I$		
$u = -0.287870 - 0.741226I$		
$a = -0.03917 + 2.02126I$	$1.57214 - 3.89522I$	0
$b = -0.524280 - 1.132570I$		
$u = 1.198490 + 0.176927I$		
$a = 1.44258 - 0.34480I$	$2.44809 - 7.61183I$	0
$b = 0.836368 + 0.866080I$		
$u = 1.198490 - 0.176927I$		
$a = 1.44258 + 0.34480I$	$2.44809 + 7.61183I$	0
$b = 0.836368 - 0.866080I$		
$u = -1.221370 + 0.080433I$		
$a = 0.42076 + 1.71830I$	$4.28980 - 3.56524I$	0
$b = -0.15014 - 1.44954I$		
$u = -1.221370 - 0.080433I$		
$a = 0.42076 - 1.71830I$	$4.28980 + 3.56524I$	0
$b = -0.15014 + 1.44954I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.392201 + 0.657414I$		
$a = -0.642889 + 0.199459I$	$2.40740 - 9.40150I$	0
$b = 1.027630 - 0.163312I$		
$u = 0.392201 - 0.657414I$		
$a = -0.642889 - 0.199459I$	$2.40740 + 9.40150I$	0
$b = 1.027630 + 0.163312I$		
$u = 1.233800 + 0.082428I$		
$a = -0.077203 + 0.973153I$	$0.69463 - 3.33644I$	0
$b = -0.06891 - 1.50286I$		
$u = 1.233800 - 0.082428I$		
$a = -0.077203 - 0.973153I$	$0.69463 + 3.33644I$	0
$b = -0.06891 + 1.50286I$		
$u = 0.965997 + 0.776238I$		
$a = -0.313323 + 1.159710I$	$6.05310 - 2.71735I$	0
$b = 0.175814 - 0.995769I$		
$u = 0.965997 - 0.776238I$		
$a = -0.313323 - 1.159710I$	$6.05310 + 2.71735I$	0
$b = 0.175814 + 0.995769I$		
$u = -0.394715 + 0.648092I$		
$a = -0.322974 - 0.363590I$	$-0.90520 + 3.98675I$	0
$b = 0.817048 + 0.245952I$		
$u = -0.394715 - 0.648092I$		
$a = -0.322974 + 0.363590I$	$-0.90520 - 3.98675I$	0
$b = 0.817048 - 0.245952I$		
$u = 0.470426 + 0.590997I$		
$a = -0.10378 - 1.77112I$	$2.06938 + 5.38468I$	0
$b = 0.528302 + 0.317611I$		
$u = 0.470426 - 0.590997I$		
$a = -0.10378 + 1.77112I$	$2.06938 - 5.38468I$	0
$b = 0.528302 - 0.317611I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.196281 + 0.707481I$		
$a = 1.12029 - 1.12234I$	$3.55125 + 0.41556I$	0
$b = -0.060722 + 0.802937I$		
$u = 0.196281 - 0.707481I$		
$a = 1.12029 + 1.12234I$	$3.55125 - 0.41556I$	0
$b = -0.060722 - 0.802937I$		
$u = -1.227590 + 0.321086I$		
$a = 0.025930 - 0.485104I$	$1.70515 - 0.70564I$	0
$b = 0.406478 + 1.190100I$		
$u = -1.227590 - 0.321086I$		
$a = 0.025930 + 0.485104I$	$1.70515 + 0.70564I$	0
$b = 0.406478 - 1.190100I$		
$u = 1.275920 + 0.022449I$		
$a = -2.45049 + 0.53181I$	$0.56365 + 5.79801I$	0
$b = -0.123232 - 0.732183I$		
$u = 1.275920 - 0.022449I$		
$a = -2.45049 - 0.53181I$	$0.56365 - 5.79801I$	0
$b = -0.123232 + 0.732183I$		
$u = -1.261800 + 0.214920I$		
$a = 1.192400 + 0.393611I$	$-0.50677 + 2.23772I$	0
$b = 0.580363 - 0.909025I$		
$u = -1.261800 - 0.214920I$		
$a = 1.192400 - 0.393611I$	$-0.50677 - 2.23772I$	0
$b = 0.580363 + 0.909025I$		
$u = 1.271900 + 0.167056I$		
$a = 1.172710 - 0.182178I$	$3.85134 + 1.89307I$	0
$b = 0.566156 + 1.187640I$		
$u = 1.271900 - 0.167056I$		
$a = 1.172710 + 0.182178I$	$3.85134 - 1.89307I$	0
$b = 0.566156 - 1.187640I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.290725 + 0.650679I$		
$a = 0.199721 - 0.356884I$	$3.78492 - 0.12194I$	0
$b = 0.530763 + 0.237368I$		
$u = 0.290725 - 0.650679I$		
$a = 0.199721 + 0.356884I$	$3.78492 + 0.12194I$	0
$b = 0.530763 - 0.237368I$		
$u = -1.248970 + 0.334674I$		
$a = -0.75589 - 1.46384I$	$-3.82438 + 3.34998I$	0
$b = -0.500992 + 0.693182I$		
$u = -1.248970 - 0.334674I$		
$a = -0.75589 + 1.46384I$	$-3.82438 - 3.34998I$	0
$b = -0.500992 - 0.693182I$		
$u = 0.068955 + 0.699239I$		
$a = 0.14091 + 1.70069I$	$5.73729 + 4.43088I$	0
$b = 0.592341 - 1.094560I$		
$u = 0.068955 - 0.699239I$		
$a = 0.14091 - 1.70069I$	$5.73729 - 4.43088I$	0
$b = 0.592341 + 1.094560I$		
$u = 0.265498 + 0.646748I$		
$a = -0.44365 + 2.56882I$	$3.19026 - 6.44191I$	$-12.0000 + 11.4713I$
$b = -0.55319 - 1.34067I$		
$u = 0.265498 - 0.646748I$		
$a = -0.44365 - 2.56882I$	$3.19026 + 6.44191I$	$-12.0000 - 11.4713I$
$b = -0.55319 + 1.34067I$		
$u = -0.128914 + 0.686799I$		
$a = 0.48784 - 1.91211I$	$0.86655 + 3.84705I$	$-12.0000 - 7.8791I$
$b = -0.631900 + 0.805408I$		
$u = -0.128914 - 0.686799I$		
$a = 0.48784 + 1.91211I$	$0.86655 - 3.84705I$	$-12.0000 + 7.8791I$
$b = -0.631900 - 0.805408I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.296260 + 0.133686I$		
$a = -0.262178 - 0.741476I$	$3.97356 + 6.66748I$	0
$b = 0.12648 + 1.75568I$		
$u = -1.296260 - 0.133686I$		
$a = -0.262178 + 0.741476I$	$3.97356 - 6.66748I$	0
$b = 0.12648 - 1.75568I$		
$u = -1.308940 + 0.014853I$		
$a = -1.62132 + 0.66875I$	$-3.89591 + 0.91839I$	0
$b = -0.490491 - 0.842042I$		
$u = -1.308940 - 0.014853I$		
$a = -1.62132 - 0.66875I$	$-3.89591 - 0.91839I$	0
$b = -0.490491 + 0.842042I$		
$u = 1.322800 + 0.009344I$		
$a = -0.848439 + 1.093570I$	$-1.48603 - 3.84847I$	0
$b = -0.54209 - 1.32608I$		
$u = 1.322800 - 0.009344I$		
$a = -0.848439 - 1.093570I$	$-1.48603 + 3.84847I$	0
$b = -0.54209 + 1.32608I$		
$u = 0.459948 + 0.480036I$		
$a = -0.742762 + 1.117410I$	$2.19251 - 3.91255I$	$-9.93504 + 2.80464I$
$b = -0.426714 - 1.166170I$		
$u = 0.459948 - 0.480036I$		
$a = -0.742762 - 1.117410I$	$2.19251 + 3.91255I$	$-9.93504 - 2.80464I$
$b = -0.426714 + 1.166170I$		
$u = 0.107507 + 0.628166I$		
$a = 0.78778 - 1.64930I$	$3.69200 + 0.88634I$	$-5.67830 - 1.96706I$
$b = 0.229799 + 1.109420I$		
$u = 0.107507 - 0.628166I$		
$a = 0.78778 + 1.64930I$	$3.69200 - 0.88634I$	$-5.67830 + 1.96706I$
$b = 0.229799 - 1.109420I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.361760 + 0.136901I$		
$a = -0.564547 - 0.578178I$	$-6.02457 + 2.64112I$	0
$b = -1.297910 - 0.250636I$		
$u = -1.361760 - 0.136901I$		
$a = -0.564547 + 0.578178I$	$-6.02457 - 2.64112I$	0
$b = -1.297910 + 0.250636I$		
$u = -1.353360 + 0.258344I$		
$a = 1.023270 + 0.363947I$	$-1.27388 + 3.07615I$	0
$b = 0.267150 - 0.491798I$		
$u = -1.353360 - 0.258344I$		
$a = 1.023270 - 0.363947I$	$-1.27388 - 3.07615I$	0
$b = 0.267150 + 0.491798I$		
$u = 1.388200 + 0.141062I$		
$a = -0.154978 + 0.438599I$	$-6.20225 - 0.29066I$	0
$b = -1.36741 + 0.54957I$		
$u = 1.388200 - 0.141062I$		
$a = -0.154978 - 0.438599I$	$-6.20225 + 0.29066I$	0
$b = -1.36741 - 0.54957I$		
$u = -1.399770 + 0.062318I$		
$a = -0.497121 + 0.174045I$	$-5.97812 - 0.65707I$	0
$b = -1.37614 - 0.61423I$		
$u = -1.399770 - 0.062318I$		
$a = -0.497121 - 0.174045I$	$-5.97812 + 0.65707I$	0
$b = -1.37614 + 0.61423I$		
$u = -1.388790 + 0.188853I$		
$a = 0.266866 - 0.041810I$	$-3.20648 - 1.42275I$	0
$b = -0.704926 - 0.828542I$		
$u = -1.388790 - 0.188853I$		
$a = 0.266866 + 0.041810I$	$-3.20648 + 1.42275I$	0
$b = -0.704926 + 0.828542I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.394520 + 0.159441I$		
$a = -1.87179 + 0.17410I$	$2.34288 - 7.63921I$	0
$b = -0.291289 - 1.138590I$		
$u = 1.394520 - 0.159441I$		
$a = -1.87179 - 0.17410I$	$2.34288 + 7.63921I$	0
$b = -0.291289 + 1.138590I$		
$u = 1.373330 + 0.292896I$		
$a = 1.290640 - 0.465002I$	$-0.52152 - 2.68073I$	0
$b = -0.046045 + 0.785237I$		
$u = 1.373330 - 0.292896I$		
$a = 1.290640 + 0.465002I$	$-0.52152 + 2.68073I$	0
$b = -0.046045 - 0.785237I$		
$u = 0.983070 + 1.009910I$		
$a = 0.469754 - 0.962394I$	$5.19721 - 3.03779I$	0
$b = -0.080777 + 0.895256I$		
$u = 0.983070 - 1.009910I$		
$a = 0.469754 + 0.962394I$	$5.19721 + 3.03779I$	0
$b = -0.080777 - 0.895256I$		
$u = 1.38600 + 0.30864I$		
$a = -0.82841 + 1.23836I$	$-3.97014 - 7.58303I$	0
$b = -0.756191 - 1.083990I$		
$u = 1.38600 - 0.30864I$		
$a = -0.82841 - 1.23836I$	$-3.97014 + 7.58303I$	0
$b = -0.756191 + 1.083990I$		
$u = -1.40763 + 0.25231I$		
$a = -1.26003 - 1.09906I$	$-2.16246 + 9.72845I$	0
$b = -0.69981 + 1.40966I$		
$u = -1.40763 - 0.25231I$		
$a = -1.26003 + 1.09906I$	$-2.16246 - 9.72845I$	0
$b = -0.69981 - 1.40966I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.42045 + 0.20751I$		
$a = 0.592511 + 0.128313I$	$-1.64361 + 3.17831I$	0
$b = 0.604947 + 0.174650I$		
$u = -1.42045 - 0.20751I$		
$a = 0.592511 - 0.128313I$	$-1.64361 - 3.17831I$	0
$b = 0.604947 - 0.174650I$		
$u = 1.43607 + 0.09953I$		
$a = -0.252449 - 0.039186I$	$-6.63863 - 1.86881I$	0
$b = -1.366660 + 0.281304I$		
$u = 1.43607 - 0.09953I$		
$a = -0.252449 + 0.039186I$	$-6.63863 + 1.86881I$	0
$b = -1.366660 - 0.281304I$		
$u = 1.43790 + 0.14720I$		
$a = -0.1103850 - 0.00666734I$	$-6.29510 - 1.52422I$	0
$b = -0.987233 + 0.285377I$		
$u = 1.43790 - 0.14720I$		
$a = -0.1103850 + 0.00666734I$	$-6.29510 + 1.52422I$	0
$b = -0.987233 - 0.285377I$		
$u = 1.41835 + 0.29295I$		
$a = -0.89887 + 1.13729I$	$-3.87520 - 7.64567I$	0
$b = -0.74061 - 1.22575I$		
$u = 1.41835 - 0.29295I$		
$a = -0.89887 - 1.13729I$	$-3.87520 + 7.64567I$	0
$b = -0.74061 + 1.22575I$		
$u = -1.44420 + 0.15774I$		
$a = 1.33023 + 1.62255I$	$-2.09785 + 8.62195I$	0
$b = 0.342815 - 1.142610I$		
$u = -1.44420 - 0.15774I$		
$a = 1.33023 - 1.62255I$	$-2.09785 - 8.62195I$	0
$b = 0.342815 + 1.142610I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.482641 + 0.225116I$		
$a = -0.175110 - 0.409993I$	$1.81686 - 3.71061I$	$-11.64852 + 7.11033I$
$b = -0.370798 - 0.961784I$		
$u = 0.482641 - 0.225116I$		
$a = -0.175110 + 0.409993I$	$1.81686 + 3.71061I$	$-11.64852 - 7.11033I$
$b = -0.370798 + 0.961784I$		
$u = 1.45667 + 0.244433I$		
$a = 0.236039 - 0.195747I$	$-6.86533 - 7.26367I$	0
$b = 1.092940 - 0.403525I$		
$u = 1.45667 - 0.244433I$		
$a = 0.236039 + 0.195747I$	$-6.86533 + 7.26367I$	0
$b = 1.092940 + 0.403525I$		
$u = -1.45603 + 0.24861I$		
$a = 0.173127 + 0.314033I$	$-3.53837 + 12.72520I$	0
$b = 1.283430 + 0.314233I$		
$u = -1.45603 - 0.24861I$		
$a = 0.173127 - 0.314033I$	$-3.53837 - 12.72520I$	0
$b = 1.283430 - 0.314233I$		
$u = -0.028786 + 0.517740I$		
$a = 0.81457 + 2.29615I$	$7.88035 - 4.42352I$	$-1.87054 + 3.58395I$
$b = 0.28053 - 1.45206I$		
$u = -0.028786 - 0.517740I$		
$a = 0.81457 - 2.29615I$	$7.88035 + 4.42352I$	$-1.87054 - 3.58395I$
$b = 0.28053 + 1.45206I$		
$u = 1.47154 + 0.19362I$		
$a = 0.90147 - 1.13844I$	$-7.54568 - 2.89339I$	0
$b = 0.458659 + 0.994130I$		
$u = 1.47154 - 0.19362I$		
$a = 0.90147 + 1.13844I$	$-7.54568 + 2.89339I$	0
$b = 0.458659 - 0.994130I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.48248 + 0.14758I$		
$a = -0.456361 + 0.205470I$	$-4.54822 + 5.43952I$	0
$b = -0.644756 + 0.495195I$		
$u = -1.48248 - 0.14758I$		
$a = -0.456361 - 0.205470I$	$-4.54822 - 5.43952I$	0
$b = -0.644756 - 0.495195I$		
$u = -1.47633 + 0.20618I$		
$a = -0.848364 - 0.497921I$	$-4.08967 + 6.59028I$	0
$b = -0.748457 + 1.145330I$		
$u = -1.47633 - 0.20618I$		
$a = -0.848364 + 0.497921I$	$-4.08967 - 6.59028I$	0
$b = -0.748457 - 1.145330I$		
$u = -1.48391 + 0.19171I$		
$a = 0.590773 + 1.031500I$	$-4.33484 - 2.49145I$	0
$b = 0.546235 - 0.874362I$		
$u = -1.48391 - 0.19171I$		
$a = 0.590773 - 1.031500I$	$-4.33484 + 2.49145I$	0
$b = 0.546235 + 0.874362I$		
$u = -0.165706 + 0.450236I$		
$a = -2.83180 - 2.91509I$	$7.40940 + 5.41990I$	$0.43513 - 7.12665I$
$b = -0.162540 + 1.304730I$		
$u = -0.165706 - 0.450236I$		
$a = -2.83180 + 2.91509I$	$7.40940 - 5.41990I$	$0.43513 + 7.12665I$
$b = -0.162540 - 1.304730I$		
$u = -0.445265 + 0.142823I$		
$a = 1.035940 - 0.399197I$	$-0.87833 - 1.17215I$	$-16.9095 + 3.7953I$
$b = -0.885753 - 0.258938I$		
$u = -0.445265 - 0.142823I$		
$a = 1.035940 + 0.399197I$	$-0.87833 + 1.17215I$	$-16.9095 - 3.7953I$
$b = -0.885753 + 0.258938I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.49380 + 0.34827I$		
$a = 1.00962 + 1.09612I$	$-0.3035 + 19.6529I$	0
$b = 0.70583 - 1.32097I$		
$u = -1.49380 - 0.34827I$		
$a = 1.00962 - 1.09612I$	$-0.3035 - 19.6529I$	0
$b = 0.70583 + 1.32097I$		
$u = -0.458680 + 0.077305I$		
$a = 3.31078 + 1.12935I$	$-0.687739 + 0.795629I$	$-14.2212 - 7.9793I$
$b = 0.097322 - 0.668829I$		
$u = -0.458680 - 0.077305I$		
$a = 3.31078 - 1.12935I$	$-0.687739 - 0.795629I$	$-14.2212 + 7.9793I$
$b = 0.097322 + 0.668829I$		
$u = 1.51374 + 0.25636I$		
$a = -0.663338 + 0.810282I$	$-3.19998 - 9.31869I$	0
$b = -0.77519 - 1.35395I$		
$u = 1.51374 - 0.25636I$		
$a = -0.663338 - 0.810282I$	$-3.19998 + 9.31869I$	0
$b = -0.77519 + 1.35395I$		
$u = 1.49706 + 0.35112I$		
$a = 0.99643 - 1.02943I$	$-4.2594 - 13.5773I$	0
$b = 0.678137 + 1.220980I$		
$u = 1.49706 - 0.35112I$		
$a = 0.99643 + 1.02943I$	$-4.2594 + 13.5773I$	0
$b = 0.678137 - 1.220980I$		
$u = -1.51250 + 0.33148I$		
$a = 1.08247 + 0.93181I$	$1.14976 + 7.58504I$	0
$b = 0.495184 - 1.155070I$		
$u = -1.51250 - 0.33148I$		
$a = 1.08247 - 0.93181I$	$1.14976 - 7.58504I$	0
$b = 0.495184 + 1.155070I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.50399 + 0.39832I$		
$a = -0.615515 - 1.085130I$	$0.26179 + 9.32717I$	0
$b = -0.446157 + 1.299990I$		
$u = -1.50399 - 0.39832I$		
$a = -0.615515 + 1.085130I$	$0.26179 - 9.32717I$	0
$b = -0.446157 - 1.299990I$		
$u = -1.55238 + 0.12872I$		
$a = 0.028752 + 0.539203I$	$-4.68327 + 5.84719I$	0
$b = 0.143653 + 0.350303I$		
$u = -1.55238 - 0.12872I$		
$a = 0.028752 - 0.539203I$	$-4.68327 - 5.84719I$	0
$b = 0.143653 - 0.350303I$		
$u = 0.293368 + 0.325282I$		
$a = 2.22644 - 5.15575I$	$3.65495 - 6.65848I$	$-7.5941 + 13.3955I$
$b = 0.273689 + 0.932741I$		
$u = 0.293368 - 0.325282I$		
$a = 2.22644 + 5.15575I$	$3.65495 + 6.65848I$	$-7.5941 - 13.3955I$
$b = 0.273689 - 0.932741I$		
$u = 0.299744 + 0.281324I$		
$a = 2.14422 - 0.94982I$	$2.02119 + 3.47303I$	$-11.57548 - 3.68608I$
$b = -0.429702 + 1.088460I$		
$u = 0.299744 - 0.281324I$		
$a = 2.14422 + 0.94982I$	$2.02119 - 3.47303I$	$-11.57548 + 3.68608I$
$b = -0.429702 - 1.088460I$		
$u = 1.60842 + 0.05916I$		
$a = 0.284118 + 0.039038I$	$-8.77342 + 0.82140I$	0
$b = 0.410167 - 0.623452I$		
$u = 1.60842 - 0.05916I$		
$a = 0.284118 - 0.039038I$	$-8.77342 - 0.82140I$	0
$b = 0.410167 + 0.623452I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.160233 + 0.351246I$		
$a = 0.85875 + 1.54908I$	$-0.697061 - 0.212567I$	$-13.66753 + 0.13954I$
$b = -0.449690 - 0.068646I$		
$u = -0.160233 - 0.351246I$		
$a = 0.85875 - 1.54908I$	$-0.697061 + 0.212567I$	$-13.66753 - 0.13954I$
$b = -0.449690 + 0.068646I$		
$u = 0.248350 + 0.280663I$		
$a = 0.78367 + 1.20017I$	$-1.09332 - 0.92676I$	$-15.5657 + 7.3109I$
$b = -0.970508 - 0.062762I$		
$u = 0.248350 - 0.280663I$		
$a = 0.78367 - 1.20017I$	$-1.09332 + 0.92676I$	$-15.5657 - 7.3109I$
$b = -0.970508 + 0.062762I$		
$u = -0.364852$		
$a = 1.08276$	-0.651812	-15.2950
$b = -0.246816$		
$u = 1.63867 + 0.02918I$		
$a = 1.050020 - 0.165177I$	$-8.55558 - 1.56892I$	0
$b = 0.352944 + 0.832227I$		
$u = 1.63867 - 0.02918I$		
$a = 1.050020 + 0.165177I$	$-8.55558 + 1.56892I$	0
$b = 0.352944 - 0.832227I$		
$u = -1.66546 + 0.00645I$		
$a = 0.108554 - 0.246590I$	$-5.01229 - 6.58318I$	0
$b = 0.413549 + 0.672361I$		
$u = -1.66546 - 0.00645I$		
$a = 0.108554 + 0.246590I$	$-5.01229 + 6.58318I$	0
$b = 0.413549 - 0.672361I$		
$u = -0.0431775 + 0.0361201I$		
$a = 6.94439 - 2.59821I$	$-1.05061 - 1.12049I$	$-28.1544 + 9.6037I$
$b = -1.172360 - 0.229584I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.0431775 - 0.0361201I$		
$a = 6.94439 + 2.59821I$	$-1.05061 + 1.12049I$	$-28.1544 - 9.6037I$
$b = -1.172360 + 0.229584I$		

II.

$$I_2^u = \langle -1.44 \times 10^{13}u^{37} - 2.58 \times 10^{13}u^{36} + \dots + 3.82 \times 10^{11}b + 1.08 \times 10^{13}, 1.44 \times 10^{13}u^{37} + 2.54 \times 10^{13}u^{36} + \dots + 3.82 \times 10^{11}a - 1.03 \times 10^{13}, u^{38} + 3u^{37} + \dots - u - 1 \rangle$$

(i) Arc colorings

$$\begin{aligned} a_6 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_{10} &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_7 &= \begin{pmatrix} 1 \\ u^2 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} -u \\ -u^3 + u \end{pmatrix} \\ a_3 &= \begin{pmatrix} -37.6664u^{37} - 66.5123u^{36} + \dots + 11.4758u + 27.0744 \\ 37.7231u^{37} + 67.4952u^{36} + \dots - 6.41289u - 28.3243 \end{pmatrix} \\ a_8 &= \begin{pmatrix} -u^2 + 1 \\ -u^4 + 2u^2 \end{pmatrix} \\ a_2 &= \begin{pmatrix} 0.0567701u^{37} + 0.982876u^{36} + \dots + 5.06287u - 1.24990 \\ 37.7231u^{37} + 67.4952u^{36} + \dots - 6.41289u - 28.3243 \end{pmatrix} \\ a_{12} &= \begin{pmatrix} 55.4262u^{37} + 97.8513u^{36} + \dots - 15.4625u - 44.2493 \\ -32.1694u^{37} - 52.9489u^{36} + \dots + 9.44269u + 23.7990 \end{pmatrix} \\ a_5 &= \begin{pmatrix} -40.1499u^{37} - 71.1073u^{36} + \dots + 1.16726u + 35.0990 \\ 7.08803u^{37} + 12.2427u^{36} + \dots - 2.41647u - 4.56722 \end{pmatrix} \\ a_4 &= \begin{pmatrix} -49.1014u^{37} - 86.9036u^{36} + \dots + 3.02309u + 41.1669 \\ 18.4481u^{37} + 32.2209u^{36} + \dots - 4.18689u - 13.4725 \end{pmatrix} \\ a_1 &= \begin{pmatrix} -53.7293u^{37} - 94.9277u^{36} + \dots + 12.5524u + 41.0974 \\ 6.19820u^{37} + 10.2091u^{36} + \dots - 4.24099u - 1.22419 \end{pmatrix} \\ a_9 &= \begin{pmatrix} -62.5444u^{37} - 107.503u^{36} + \dots + 13.5992u + 48.3800 \\ 106.743u^{37} + 185.599u^{36} + \dots - 17.6938u - 87.3072 \end{pmatrix} \end{aligned}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes

$$= -\frac{54171862183872}{382195085957}u^{37} - \frac{96482424360244}{382195085957}u^{36} + \dots + \frac{11659328615494}{382195085957}u + \frac{44003727995628}{382195085957}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{38} - 4u^{37} + \cdots - 3u + 1$
c_2	$u^{38} - 14u^{37} + \cdots - 49u + 5$
c_3	$u^{38} - 2u^{37} + \cdots + 6u + 1$
c_4	$u^{38} + u^{37} + \cdots + 5u - 1$
c_5	$u^{38} + 14u^{37} + \cdots + 49u + 5$
c_6, c_7	$u^{38} + 3u^{37} + \cdots - u - 1$
c_8	$u^{38} + 3u^{37} + \cdots - 3u - 5$
c_9	$u^{38} + u^{37} + \cdots - 93u - 25$
c_{10}	$u^{38} - 3u^{37} + \cdots + u - 1$
c_{11}	$u^{38} - 2u^{37} + \cdots + 84u + 25$
c_{12}	$u^{38} - 3u^{37} + \cdots + 3u - 5$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{38} - 6y^{37} + \cdots + 23y + 1$
c_2, c_5	$y^{38} + 20y^{37} + \cdots + 499y + 25$
c_3	$y^{38} + 26y^{37} + \cdots + 12y + 1$
c_4	$y^{38} - 15y^{37} + \cdots + 5y + 1$
c_6, c_7, c_{10}	$y^{38} - 41y^{37} + \cdots - 5y + 1$
c_8, c_{12}	$y^{38} + 21y^{37} + \cdots + 401y + 25$
c_9	$y^{38} + 15y^{37} + \cdots + 551y + 625$
c_{11}	$y^{38} - 26y^{37} + \cdots + 1194y + 625$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.859266 + 0.368693I$ $a = 0.175718 - 0.330830I$ $b = -0.278786 + 1.112480I$	$1.25814 + 1.93262I$	$-9.88591 - 3.16017I$
$u = 0.859266 - 0.368693I$ $a = 0.175718 + 0.330830I$ $b = -0.278786 - 1.112480I$	$1.25814 - 1.93262I$	$-9.88591 + 3.16017I$
$u = 1.124330 + 0.019984I$ $a = 0.183773 - 0.852803I$ $b = -0.210201 + 1.388410I$	$1.07759 + 2.72612I$	$-12.00000 + 3.09347I$
$u = 1.124330 - 0.019984I$ $a = 0.183773 + 0.852803I$ $b = -0.210201 - 1.388410I$	$1.07759 - 2.72612I$	$-12.00000 - 3.09347I$
$u = -0.609311 + 0.962052I$ $a = -0.29247 - 1.53193I$ $b = -0.218251 + 1.074160I$	$5.96143 + 4.17639I$	$-12.0000 - 9.6189I$
$u = -0.609311 - 0.962052I$ $a = -0.29247 + 1.53193I$ $b = -0.218251 - 1.074160I$	$5.96143 - 4.17639I$	$-12.0000 + 9.6189I$
$u = -1.250820 + 0.017997I$ $a = 0.92055 + 1.07407I$ $b = 0.02632 - 1.51024I$	$3.76327 - 4.60753I$	0
$u = -1.250820 - 0.017997I$ $a = 0.92055 - 1.07407I$ $b = 0.02632 + 1.51024I$	$3.76327 + 4.60753I$	0
$u = 1.249410 + 0.236783I$ $a = 1.51764 - 0.95300I$ $b = 0.140287 + 0.596985I$	$-3.04204 - 2.57872I$	0
$u = 1.249410 - 0.236783I$ $a = 1.51764 + 0.95300I$ $b = 0.140287 - 0.596985I$	$-3.04204 + 2.57872I$	0

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.294200 + 0.096935I$		
$a = 2.31084 + 0.56353I$	$0.34651 + 7.02010I$	0
$b = 0.386974 - 0.773655I$		
$u = -1.294200 - 0.096935I$		
$a = 2.31084 - 0.56353I$	$0.34651 - 7.02010I$	0
$b = 0.386974 + 0.773655I$		
$u = 0.330023 + 0.597429I$		
$a = -0.36035 + 1.85679I$	$2.78563 - 5.02798I$	$-8.27973 + 6.51996I$
$b = -0.554308 - 1.264460I$		
$u = 0.330023 - 0.597429I$		
$a = -0.36035 - 1.85679I$	$2.78563 + 5.02798I$	$-8.27973 - 6.51996I$
$b = -0.554308 + 1.264460I$		
$u = 0.491553 + 0.432403I$		
$a = -1.77071 + 2.38937I$	$-0.371497 + 0.007237I$	$-5.73743 - 0.08040I$
$b = -0.127262 - 0.728704I$		
$u = 0.491553 - 0.432403I$		
$a = -1.77071 - 2.38937I$	$-0.371497 - 0.007237I$	$-5.73743 + 0.08040I$
$b = -0.127262 + 0.728704I$		
$u = 1.358160 + 0.101247I$		
$a = -0.516411 + 0.297232I$	$-5.26534 - 2.39484I$	0
$b = -1.365550 + 0.091506I$		
$u = 1.358160 - 0.101247I$		
$a = -0.516411 - 0.297232I$	$-5.26534 + 2.39484I$	0
$b = -1.365550 - 0.091506I$		
$u = -0.949326 + 0.984640I$		
$a = 0.370389 + 0.952334I$	$5.10834 + 2.74797I$	0
$b = -0.140179 - 0.876851I$		
$u = -0.949326 - 0.984640I$		
$a = 0.370389 - 0.952334I$	$5.10834 - 2.74797I$	0
$b = -0.140179 + 0.876851I$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.382580 + 0.130806I$		
$a = -0.256754 - 0.265819I$	$-5.71831 + 0.55183I$	0
$b = -1.44483 - 0.54599I$		
$u = -1.382580 - 0.130806I$		
$a = -0.256754 + 0.265819I$	$-5.71831 - 0.55183I$	0
$b = -1.44483 + 0.54599I$		
$u = -0.537172 + 0.141991I$		
$a = -1.73560 - 0.70712I$	$6.43473 + 5.01326I$	$-7.73429 - 4.82561I$
$b = -0.059145 + 1.333020I$		
$u = -0.537172 - 0.141991I$		
$a = -1.73560 + 0.70712I$	$6.43473 - 5.01326I$	$-7.73429 + 4.82561I$
$b = -0.059145 - 1.333020I$		
$u = -1.43837 + 0.26122I$		
$a = -0.898407 - 0.930294I$	$-2.95007 + 8.28346I$	0
$b = -0.79564 + 1.31551I$		
$u = -1.43837 - 0.26122I$		
$a = -0.898407 + 0.930294I$	$-2.95007 - 8.28346I$	0
$b = -0.79564 - 1.31551I$		
$u = 1.46891 + 0.25196I$		
$a = -0.99081 + 1.05453I$	$-0.59078 - 8.01571I$	0
$b = -0.439317 - 1.265220I$		
$u = 1.46891 - 0.25196I$		
$a = -0.99081 - 1.05453I$	$-0.59078 + 8.01571I$	0
$b = -0.439317 + 1.265220I$		
$u = 0.482771$		
$a = -0.388056$	-1.85343	-21.8960
$b = -0.584916$		
$u = -1.54190$		
$a = -0.425930$	-8.78782	0
$b = -0.482360$		

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.397980 + 0.178255I$		
$a = -4.06482 - 2.10886I$	$3.56960 - 5.96026I$	$-7.50877 + 2.08306I$
$b = 0.225393 + 0.757206I$		
$u = -0.397980 - 0.178255I$		
$a = -4.06482 + 2.10886I$	$3.56960 + 5.96026I$	$-7.50877 - 2.08306I$
$b = 0.225393 - 0.757206I$		
$u = 1.60137 + 0.10269I$		
$a = -0.154181 + 0.208591I$	$-4.24429 - 6.01098I$	0
$b = 0.017121 + 0.601807I$		
$u = 1.60137 - 0.10269I$		
$a = -0.154181 - 0.208591I$	$-4.24429 + 6.01098I$	0
$b = 0.017121 - 0.601807I$		
$u = -1.64831 + 0.03460I$		
$a = -1.040020 - 0.205206I$	$-8.50395 + 1.53610I$	0
$b = -0.344348 + 0.839776I$		
$u = -1.64831 - 0.03460I$		
$a = -1.040020 + 0.205206I$	$-8.50395 - 1.53610I$	0
$b = -0.344348 - 0.839776I$		
$u = 0.054610 + 0.285264I$		
$a = 1.008620 - 0.438737I$	$-0.878057 + 1.043190I$	$11.01358 + 7.74779I$
$b = -1.284650 + 0.250589I$		
$u = 0.054610 - 0.285264I$		
$a = 1.008620 + 0.438737I$	$-0.878057 - 1.043190I$	$11.01358 - 7.74779I$
$b = -1.284650 - 0.250589I$		

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^{38} - 4u^{37} + \dots - 3u + 1)(u^{151} - 9u^{150} + \dots - 6836u + 1689)$
c_2	$(u^{38} - 14u^{37} + \dots - 49u + 5)(u^{151} + 9u^{150} + \dots - 1990u + 1825)$
c_3	$(u^{38} - 2u^{37} + \dots + 6u + 1)(u^{151} + 3u^{150} + \dots + 1987u + 97)$
c_4	$(u^{38} + u^{37} + \dots + 5u - 1)(u^{151} + 6u^{150} + \dots - 130250u + 29375)$
c_5	$(u^{38} + 14u^{37} + \dots + 49u + 5)(u^{151} + 9u^{150} + \dots - 1990u + 1825)$
c_6, c_7	$(u^{38} + 3u^{37} + \dots - u - 1)(u^{151} + 4u^{150} + \dots + 26u + 1)$
c_8	$(u^{38} + 3u^{37} + \dots - 3u - 5)(u^{151} + 46u^{149} + \dots + 886u + 149)$
c_9	$(u^{38} + u^{37} + \dots - 93u - 25)(u^{151} - 2u^{150} + \dots - 4383642u + 726827)$
c_{10}	$(u^{38} - 3u^{37} + \dots + u - 1)(u^{151} + 4u^{150} + \dots + 26u + 1)$
c_{11}	$(u^{38} - 2u^{37} + \dots + 84u + 25)(u^{151} - 15u^{150} + \dots - 31153u + 6533)$
c_{12}	$(u^{38} - 3u^{37} + \dots + 3u - 5)(u^{151} + 46u^{149} + \dots + 886u + 149)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^{38} - 6y^{37} + \dots + 23y + 1)$ $\cdot (y^{151} + 21y^{150} + \dots - 147730430y - 2852721)$
c_2, c_5	$(y^{38} + 20y^{37} + \dots + 499y + 25)$ $\cdot (y^{151} + 79y^{150} + \dots - 91731950y - 3330625)$
c_3	$(y^{38} + 26y^{37} + \dots + 12y + 1)(y^{151} + 33y^{150} + \dots + 3420489y - 9409)$
c_4	$(y^{38} - 15y^{37} + \dots + 5y + 1)$ $\cdot (y^{151} + 8y^{150} + \dots - 145840000000y - 862890625)$
c_6, c_7, c_{10}	$(y^{38} - 41y^{37} + \dots - 5y + 1)(y^{151} - 146y^{150} + \dots + 122y - 1)$
c_8, c_{12}	$(y^{38} + 21y^{37} + \dots + 401y + 25)$ $\cdot (y^{151} + 92y^{150} + \dots - 812880y - 22201)$
c_9	$(y^{38} + 15y^{37} + \dots + 551y + 625)$ $\cdot (y^{151} + 2y^{150} + \dots + 63007761680138y - 528277487929)$
c_{11}	$(y^{38} - 26y^{37} + \dots + 1194y + 625)$ $\cdot (y^{151} - 15y^{150} + \dots - 3528388777y - 42680089)$