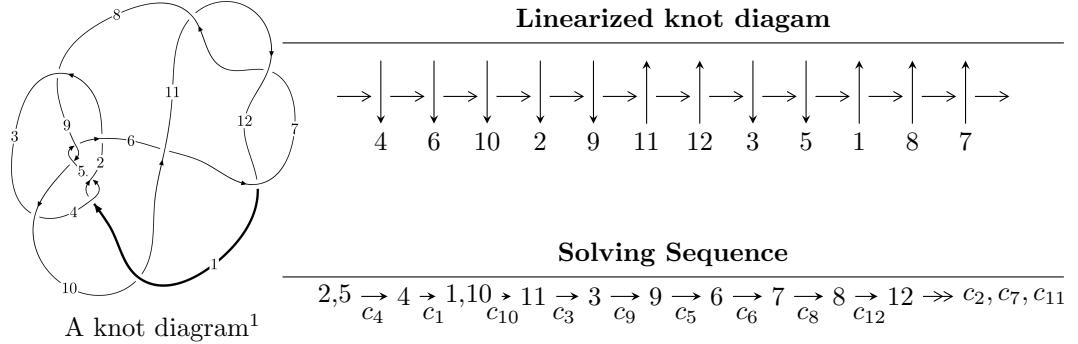


$12a_{0945}$  ( $K12a_{0945}$ )



**Ideals for irreducible components<sup>2</sup> of  $X_{\text{par}}$**

$$I_1^u = \langle 1.02739 \times 10^{332} u^{98} - 2.37382 \times 10^{331} u^{97} + \dots + 3.74964 \times 10^{331} b - 1.45413 \times 10^{332}, \\ - 1.49879 \times 10^{332} u^{98} + 7.34438 \times 10^{331} u^{97} + \dots + 3.74964 \times 10^{331} a + 3.88173 \times 10^{332}, \\ u^{99} - u^{98} + \dots + 23u^2 + 1 \rangle$$

\* 1 irreducible components of  $\dim_{\mathbb{C}} = 0$ , with total 99 representations.

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<sup>1</sup>The 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>).

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

$$\text{I. } I_1^u = \langle 1.03 \times 10^{332}u^{98} - 2.37 \times 10^{331}u^{97} + \dots + 3.75 \times 10^{331}b - 1.45 \times 10^{332}, -1.50 \times 10^{332}u^{98} + 7.34 \times 10^{331}u^{97} + \dots + 3.75 \times 10^{331}a + 3.88 \times 10^{332}, u^{99} - u^{98} + \dots + 23u^2 + 1 \rangle$$

(i) **Arc colorings**

$$\begin{aligned} a_2 &= \begin{pmatrix} 0 \\ u \end{pmatrix} \\ a_5 &= \begin{pmatrix} 1 \\ 0 \end{pmatrix} \\ a_4 &= \begin{pmatrix} 1 \\ -u^2 \end{pmatrix} \\ a_1 &= \begin{pmatrix} u \\ -u^3 + u \end{pmatrix} \\ a_{10} &= \begin{pmatrix} 3.99717u^{98} - 1.95869u^{97} + \dots + 5.84289u - 10.3523 \\ -2.73998u^{98} + 0.633079u^{97} + \dots + 11.1270u + 3.87805 \end{pmatrix} \\ a_{11} &= \begin{pmatrix} 1.49086u^{98} - 1.37385u^{97} + \dots + 10.6124u - 7.30046 \\ -3.56577u^{98} + 0.832592u^{97} + \dots + 13.3902u + 5.00840 \end{pmatrix} \\ a_3 &= \begin{pmatrix} 1.93055u^{98} - 4.68758u^{97} + \dots + 18.1992u + 7.78150 \\ 0.155337u^{98} - 1.61346u^{97} + \dots - 1.45150u + 2.25046 \end{pmatrix} \\ a_9 &= \begin{pmatrix} 1.25719u^{98} - 1.32561u^{97} + \dots + 16.9699u - 6.47424 \\ -2.73998u^{98} + 0.633079u^{97} + \dots + 11.1270u + 3.87805 \end{pmatrix} \\ a_6 &= \begin{pmatrix} 1.93654u^{98} + 1.72896u^{97} + \dots - 27.0840u - 7.72022 \\ -4.92304u^{98} + 0.941981u^{97} + \dots + 8.31108u + 5.39610 \end{pmatrix} \\ a_7 &= \begin{pmatrix} 0.371340u^{98} + 1.23713u^{97} + \dots - 22.3156u - 0.337780 \\ 1.37216u^{98} - 0.185051u^{97} + \dots - 5.23013u - 2.09610 \end{pmatrix} \\ a_8 &= \begin{pmatrix} 0.277222u^{98} - 0.970149u^{97} + \dots + 24.8608u - 5.43616 \\ -2.32353u^{98} + 0.371790u^{97} + \dots + 10.4207u + 3.83701 \end{pmatrix} \\ a_{12} &= \begin{pmatrix} 0.402554u^{98} - 0.156919u^{97} + \dots + 23.0714u - 6.03950 \\ -1.47855u^{98} + 0.456172u^{97} + \dots + 8.63301u + 1.93043 \end{pmatrix} \end{aligned}$$

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

(iii) **Cusp Shapes** =  $4.12981u^{98} + 4.34684u^{97} + \dots - 11.0775u - 8.25641$

**(iv) u-Polynomials at the component**

Crossings	u-Polynomials at each crossing
$c_1, c_4$	$u^{99} - u^{98} + \cdots + 23u^2 + 1$
$c_2$	$u^{99} - 17u^{98} + \cdots - 188u + 19$
$c_3$	$u^{99} - u^{98} + \cdots + 140544u + 38593$
$c_5, c_9$	$u^{99} + 3u^{98} + \cdots + 4u + 1$
$c_6$	$u^{99} + 3u^{98} + \cdots + 27558u + 10961$
$c_7, c_{11}, c_{12}$	$u^{99} - 3u^{98} + \cdots - 5u^2 + 1$
$c_8$	$u^{99} + u^{98} + \cdots + 2u + 1$
$c_{10}$	$u^{99} + 17u^{98} + \cdots - 745808u - 47873$

**(v) Riley Polynomials at the component**

Crossings	Riley Polynomials at each crossing
$c_1, c_4$	$y^{99} - 65y^{98} + \cdots - 46y - 1$
$c_2$	$y^{99} + 167y^{98} + \cdots + 15926y - 361$
$c_3$	$y^{99} - 173y^{98} + \cdots + 31500556694y - 1489419649$
$c_5, c_9$	$y^{99} + 59y^{98} + \cdots + 10y - 1$
$c_6$	$y^{99} + 23y^{98} + \cdots - 2411815078y - 120143521$
$c_7, c_{11}, c_{12}$	$y^{99} + 91y^{98} + \cdots + 10y - 1$
$c_8$	$y^{99} + 3y^{98} + \cdots + 66y - 1$
$c_{10}$	$y^{99} + 63y^{98} + \cdots + 18472642594y - 2291824129$

**(vi) Complex Volumes and Cusp Shapes**

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.994492 + 0.018996I$		
$a = -8.09675 + 8.01488I$	$-5.85875 + 4.44226I$	0
$b = 0.036500 + 1.030300I$		
$u = -0.994492 - 0.018996I$		
$a = -8.09675 - 8.01488I$	$-5.85875 - 4.44226I$	0
$b = 0.036500 - 1.030300I$		
$u = 0.975049 + 0.188085I$		
$a = 1.70227 + 0.71514I$	$-0.83712 - 3.39889I$	0
$b = -0.86106 - 1.23598I$		
$u = 0.975049 - 0.188085I$		
$a = 1.70227 - 0.71514I$	$-0.83712 + 3.39889I$	0
$b = -0.86106 + 1.23598I$		
$u = -0.983393 + 0.005334I$		
$a = 10.61980 + 0.36470I$	$-0.29450 - 1.51441I$	0
$b = -0.046544 + 0.996080I$		
$u = -0.983393 - 0.005334I$		
$a = 10.61980 - 0.36470I$	$-0.29450 + 1.51441I$	0
$b = -0.046544 - 0.996080I$		
$u = 0.940357 + 0.256776I$		
$a = 1.52630 - 0.64498I$	$-3.47108 - 4.80291I$	0
$b = -1.120820 + 0.374656I$		
$u = 0.940357 - 0.256776I$		
$a = 1.52630 + 0.64498I$	$-3.47108 + 4.80291I$	0
$b = -1.120820 - 0.374656I$		
$u = 1.015250 + 0.168887I$		
$a = 0.501708 - 0.911504I$	$-5.64603 - 6.02681I$	0
$b = -0.40788 + 1.65089I$		
$u = 1.015250 - 0.168887I$		
$a = 0.501708 + 0.911504I$	$-5.64603 + 6.02681I$	0
$b = -0.40788 - 1.65089I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.372488 + 0.867010I$		
$a = 0.0622155 - 0.1044290I$	$5.94439 + 2.18444I$	0
$b = 0.329059 - 1.244270I$		
$u = 0.372488 - 0.867010I$		
$a = 0.0622155 + 0.1044290I$	$5.94439 - 2.18444I$	0
$b = 0.329059 + 1.244270I$		
$u = 0.305094 + 1.030890I$		
$a = 0.056979 + 0.202482I$	$2.48048 + 5.30165I$	0
$b = -0.357545 + 1.219710I$		
$u = 0.305094 - 1.030890I$		
$a = 0.056979 - 0.202482I$	$2.48048 - 5.30165I$	0
$b = -0.357545 - 1.219710I$		
$u = 0.901677 + 0.097789I$		
$a = -0.216939 + 1.082560I$	$0.62004 - 2.35166I$	0
$b = 0.20471 - 1.71903I$		
$u = 0.901677 - 0.097789I$		
$a = -0.216939 - 1.082560I$	$0.62004 + 2.35166I$	0
$b = 0.20471 + 1.71903I$		
$u = -0.509715 + 0.746888I$		
$a = -0.169108 + 0.504425I$	$-7.28561 - 1.78675I$	0
$b = 0.533589 + 0.088687I$		
$u = -0.509715 - 0.746888I$		
$a = -0.169108 - 0.504425I$	$-7.28561 + 1.78675I$	0
$b = 0.533589 - 0.088687I$		
$u = -0.222287 + 0.862791I$		
$a = 0.302618 - 0.658490I$	$-6.34251 + 7.39460I$	0
$b = -0.607223 - 0.026295I$		
$u = -0.222287 - 0.862791I$		
$a = 0.302618 + 0.658490I$	$-6.34251 - 7.39460I$	0
$b = -0.607223 + 0.026295I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.025930 + 0.444337I$		
$a = 1.71502 + 0.33410I$	$0.29849 - 3.48845I$	0
$b = -0.661676 - 1.231940I$		
$u = 1.025930 - 0.444337I$		
$a = 1.71502 - 0.33410I$	$0.29849 + 3.48845I$	0
$b = -0.661676 + 1.231940I$		
$u = -1.105620 + 0.182833I$		
$a = -1.53301 + 0.66453I$	$-0.893637 + 0.928581I$	0
$b = 0.149783 - 0.858878I$		
$u = -1.105620 - 0.182833I$		
$a = -1.53301 - 0.66453I$	$-0.893637 - 0.928581I$	0
$b = 0.149783 + 0.858878I$		
$u = -1.052710 + 0.386949I$		
$a = -0.139428 + 0.138796I$	$-4.88550 + 1.29779I$	0
$b = 0.348717 + 0.244272I$		
$u = -1.052710 - 0.386949I$		
$a = -0.139428 - 0.138796I$	$-4.88550 - 1.29779I$	0
$b = 0.348717 - 0.244272I$		
$u = 0.490947 + 0.724635I$		
$a = -0.115757 - 0.091258I$	$1.98588 - 0.94910I$	0
$b = -0.308124 + 1.285350I$		
$u = 0.490947 - 0.724635I$		
$a = -0.115757 + 0.091258I$	$1.98588 + 0.94910I$	0
$b = -0.308124 - 1.285350I$		
$u = 0.024409 + 1.144880I$		
$a = 0.161084 + 0.384659I$	$1.78944 + 4.02340I$	0
$b = -0.368663 + 1.164000I$		
$u = 0.024409 - 1.144880I$		
$a = 0.161084 - 0.384659I$	$1.78944 - 4.02340I$	0
$b = -0.368663 - 1.164000I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.725573 + 0.425618I$		
$a = 1.29629 + 1.12020I$	$1.10389 + 2.20019I$	0
$b = -0.236866 + 0.999057I$		
$u = -0.725573 - 0.425618I$		
$a = 1.29629 - 1.12020I$	$1.10389 - 2.20019I$	0
$b = -0.236866 - 0.999057I$		
$u = -0.844241 + 0.798032I$		
$a = -0.781444 - 0.619640I$	$-3.03348 + 4.34292I$	0
$b = 0.326365 - 0.989143I$		
$u = -0.844241 - 0.798032I$		
$a = -0.781444 + 0.619640I$	$-3.03348 - 4.34292I$	0
$b = 0.326365 + 0.989143I$		
$u = -0.814307 + 0.082370I$		
$a = -3.09073 - 1.58258I$	$-1.93903 + 0.16998I$	0
$b = 0.147889 - 1.005710I$		
$u = -0.814307 - 0.082370I$		
$a = -3.09073 + 1.58258I$	$-1.93903 - 0.16998I$	0
$b = 0.147889 + 1.005710I$		
$u = 0.818015 + 0.013466I$		
$a = -1.83249 + 0.88185I$	$1.061010 - 0.905393I$	0
$b = 1.032470 - 0.802275I$		
$u = 0.818015 - 0.013466I$		
$a = -1.83249 - 0.88185I$	$1.061010 + 0.905393I$	0
$b = 1.032470 + 0.802275I$		
$u = 1.171430 + 0.160474I$		
$a = -1.35590 - 0.61144I$	$-8.18419 - 5.25528I$	0
$b = 0.73024 + 1.40259I$		
$u = 1.171430 - 0.160474I$		
$a = -1.35590 + 0.61144I$	$-8.18419 + 5.25528I$	0
$b = 0.73024 - 1.40259I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.814684$		
$a = -0.0793313$	-1.15052	-10.1560
$b = -0.268977$		
$u = -0.201959 + 0.761271I$		
$a = -0.248856 + 0.715476I$	$-0.70303 + 4.11723I$	0
$b = 0.583104 + 0.002888I$		
$u = -0.201959 - 0.761271I$		
$a = -0.248856 - 0.715476I$	$-0.70303 - 4.11723I$	0
$b = 0.583104 - 0.002888I$		
$u = -0.133156 + 1.210760I$		
$a = -0.248294 - 0.438800I$	$-4.35827 + 1.78343I$	0
$b = 0.378986 - 1.135900I$		
$u = -0.133156 - 1.210760I$		
$a = -0.248294 + 0.438800I$	$-4.35827 - 1.78343I$	0
$b = 0.378986 + 1.135900I$		
$u = 1.113910 + 0.518276I$		
$a = -1.63257 - 0.22728I$	$3.60786 - 7.23643I$	0
$b = 0.627590 + 1.260540I$		
$u = 1.113910 - 0.518276I$		
$a = -1.63257 + 0.22728I$	$3.60786 + 7.23643I$	0
$b = 0.627590 - 1.260540I$		
$u = 0.091381 + 1.259280I$		
$a = -0.206832 - 0.324273I$	$2.61420 + 7.82431I$	0
$b = 0.389645 - 1.173270I$		
$u = 0.091381 - 1.259280I$		
$a = -0.206832 + 0.324273I$	$2.61420 - 7.82431I$	0
$b = 0.389645 + 1.173270I$		
$u = 1.270440 + 0.319765I$		
$a = 1.323150 - 0.301719I$	$-6.03634 - 3.86723I$	0
$b = -1.147510 + 0.129638I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.270440 - 0.319765I$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	
$a = 1.323150 + 0.301719I$	$-6.03634 + 3.86723I$	0
$b = -1.147510 - 0.129638I$		
$u = 1.186390 + 0.567593I$		
$a = 1.57142 + 0.16120I$	$-0.32932 - 10.94210I$	0
$b = -0.60806 - 1.27771I$		
$u = 1.186390 - 0.567593I$		
$a = 1.57142 - 0.16120I$	$-0.32932 + 10.94210I$	0
$b = -0.60806 + 1.27771I$		
$u = -0.351502 + 0.583602I$		
$a = 0.045268 - 0.641591I$	$-1.42824 + 0.58824I$	$-6.32763 + 0.I$
$b = -0.505707 - 0.020078I$		
$u = -0.351502 - 0.583602I$		
$a = 0.045268 + 0.641591I$	$-1.42824 - 0.58824I$	$-6.32763 + 0.I$
$b = -0.505707 + 0.020078I$		
$u = 0.080166 + 1.328970I$		
$a = 0.239652 + 0.318158I$	$-3.08712 + 11.21620I$	0
$b = -0.400675 + 1.169980I$		
$u = 0.080166 - 1.328970I$		
$a = 0.239652 - 0.318158I$	$-3.08712 - 11.21620I$	0
$b = -0.400675 - 1.169980I$		
$u = 1.293750 + 0.385495I$		
$a = -1.268880 + 0.317852I$	$-5.16454 - 8.24227I$	0
$b = 1.120670 - 0.123023I$		
$u = 1.293750 - 0.385495I$		
$a = -1.268880 - 0.317852I$	$-5.16454 + 8.24227I$	0
$b = 1.120670 + 0.123023I$		
$u = 1.335970 + 0.253610I$		
$a = -1.323960 + 0.222139I$	$-12.94020 - 1.45742I$	0
$b = 1.164640 - 0.095026I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.335970 - 0.253610I$	$-12.94020 + 1.45742I$	0
$a = -1.323960 - 0.222139I$		
$b = 1.164640 + 0.095026I$		
$u = 1.332610 + 0.410531I$	$-11.0505 - 11.9189I$	0
$a = 1.238100 - 0.304781I$		
$b = -1.111890 + 0.110138I$		
$u = 1.332610 - 0.410531I$	$-11.0505 + 11.9189I$	0
$a = 1.238100 + 0.304781I$		
$b = -1.111890 - 0.110138I$		
$u = -1.42681 + 0.24216I$	$-5.40693 + 1.49418I$	0
$a = 0.712034 - 0.124915I$		
$b = -0.285167 + 0.736373I$		
$u = -1.42681 - 0.24216I$	$-5.40693 - 1.49418I$	0
$a = 0.712034 + 0.124915I$		
$b = -0.285167 - 0.736373I$		
$u = 1.34786 + 0.55727I$	$-2.33740 - 9.95857I$	0
$a = 1.43150 + 0.12722I$		
$b = -0.59525 - 1.31276I$		
$u = 1.34786 - 0.55727I$	$-2.33740 + 9.95857I$	0
$a = 1.43150 - 0.12722I$		
$b = -0.59525 + 1.31276I$		
$u = 1.38738 + 0.50905I$	$-9.12270 - 7.60585I$	0
$a = -1.386450 - 0.150028I$		
$b = 0.59836 + 1.32454I$		
$u = 1.38738 - 0.50905I$	$-9.12270 + 7.60585I$	0
$a = -1.386450 + 0.150028I$		
$b = 0.59836 - 1.32454I$		
$u = -1.45704 + 0.27018I$	$-3.73507 + 1.99100I$	0
$a = 0.329760 - 0.023893I$		
$b = -0.353412 - 0.464496I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.45704 - 0.27018I$		
$a = 0.329760 + 0.023893I$	$-3.73507 - 1.99100I$	0
$b = -0.353412 + 0.464496I$		
$u = 1.36786 + 0.59962I$		
$a = -1.42831 - 0.09018I$	$-1.4502 - 14.2394I$	0
$b = 0.58643 + 1.31207I$		
$u = 1.36786 - 0.59962I$		
$a = -1.42831 + 0.09018I$	$-1.4502 + 14.2394I$	0
$b = 0.58643 - 1.31207I$		
$u = 0.137003 + 0.479807I$		
$a = 0.415392 - 1.273760I$	$-1.49366 + 1.81906I$	$-1.74281 - 3.69548I$
$b = -0.573266 + 0.183599I$		
$u = 0.137003 - 0.479807I$		
$a = 0.415392 + 1.273760I$	$-1.49366 - 1.81906I$	$-1.74281 + 3.69548I$
$b = -0.573266 - 0.183599I$		
$u = -1.33451 + 0.72094I$		
$a = -0.795110 - 0.245516I$	$-2.92305 + 1.66150I$	0
$b = 0.365795 - 0.879457I$		
$u = -1.33451 - 0.72094I$		
$a = -0.795110 + 0.245516I$	$-2.92305 - 1.66150I$	0
$b = 0.365795 + 0.879457I$		
$u = -1.51217 + 0.15103I$		
$a = -0.384725 - 0.022882I$	$-3.83043 - 1.65845I$	0
$b = 0.336258 + 0.528779I$		
$u = -1.51217 - 0.15103I$		
$a = -0.384725 + 0.022882I$	$-3.83043 + 1.65845I$	0
$b = 0.336258 - 0.528779I$		
$u = 1.39495 + 0.61409I$		
$a = 1.41261 + 0.07302I$	$-7.2935 - 17.8795I$	0
$b = -0.58199 - 1.31505I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.39495 - 0.61409I$		
$a = 1.41261 - 0.07302I$	$-7.2935 + 17.8795I$	0
$b = -0.58199 + 1.31505I$		
$u = -1.28110 + 0.84155I$		
$a = 0.760307 + 0.307367I$	$-2.60113 + 5.38027I$	0
$b = -0.379856 + 0.907214I$		
$u = -1.28110 - 0.84155I$		
$a = 0.760307 - 0.307367I$	$-2.60113 - 5.38027I$	0
$b = -0.379856 - 0.907214I$		
$u = -1.51624 + 0.33515I$		
$a = -0.348799 + 0.058863I$	$-9.58932 + 4.99478I$	0
$b = 0.393435 + 0.465014I$		
$u = -1.51624 - 0.33515I$		
$a = -0.348799 - 0.058863I$	$-9.58932 - 4.99478I$	0
$b = 0.393435 - 0.465014I$		
$u = -1.32704 + 0.90872I$		
$a = -0.723788 - 0.302511I$	$-8.44003 + 8.52317I$	0
$b = 0.397500 - 0.908490I$		
$u = -1.32704 - 0.90872I$		
$a = -0.723788 + 0.302511I$	$-8.44003 - 8.52317I$	0
$b = 0.397500 + 0.908490I$		
$u = -1.60381 + 0.15830I$		
$a = 0.418149 - 0.011118I$	$-9.73725 - 4.53902I$	0
$b = -0.375095 - 0.547160I$		
$u = -1.60381 - 0.15830I$		
$a = 0.418149 + 0.011118I$	$-9.73725 + 4.53902I$	0
$b = -0.375095 + 0.547160I$		
$u = -1.44341 + 0.73730I$		
$a = 0.746384 + 0.216819I$	$-8.91446 - 1.06218I$	0
$b = -0.387157 + 0.863065I$		

Solutions to $I_1^u$	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.44341 - 0.73730I$		
$a = 0.746384 - 0.216819I$	$-8.91446 + 1.06218I$	0
$b = -0.387157 - 0.863065I$		
$u = 0.263548 + 0.166515I$		
$a = 3.54408 + 1.76475I$	$-3.86603 + 4.15313I$	$-1.33182 - 1.44818I$
$b = -0.391506 - 0.811020I$		
$u = 0.263548 - 0.166515I$		
$a = 3.54408 - 1.76475I$	$-3.86603 - 4.15313I$	$-1.33182 + 1.44818I$
$b = -0.391506 + 0.811020I$		
$u = 0.291799 + 0.090574I$		
$a = -1.56516 + 2.32607I$	$1.26906 - 0.95925I$	$4.32293 + 1.61283I$
$b = 0.466028 - 0.523896I$		
$u = 0.291799 - 0.090574I$		
$a = -1.56516 - 2.32607I$	$1.26906 + 0.95925I$	$4.32293 - 1.61283I$
$b = 0.466028 + 0.523896I$		
$u = -0.168662 + 0.052708I$		
$a = -3.79045 + 6.49188I$	$-4.37987 - 4.27329I$	$-3.90810 + 4.27086I$
$b = 0.166465 + 1.024460I$		
$u = -0.168662 - 0.052708I$		
$a = -3.79045 - 6.49188I$	$-4.37987 + 4.27329I$	$-3.90810 - 4.27086I$
$b = 0.166465 - 1.024460I$		
$u = -0.0185879 + 0.1145680I$		
$a = -6.90872 + 3.17394I$	$1.24428 + 1.65585I$	$0.29239 - 4.10547I$
$b = -0.106809 + 1.097290I$		
$u = -0.0185879 - 0.1145680I$		
$a = -6.90872 - 3.17394I$	$1.24428 - 1.65585I$	$0.29239 + 4.10547I$
$b = -0.106809 - 1.097290I$		

## II. u-Polynomials

Crossings	u-Polynomials at each crossing
$c_1, c_4$	$u^{99} - u^{98} + \cdots + 23u^2 + 1$
$c_2$	$u^{99} - 17u^{98} + \cdots - 188u + 19$
$c_3$	$u^{99} - u^{98} + \cdots + 140544u + 38593$
$c_5, c_9$	$u^{99} + 3u^{98} + \cdots + 4u + 1$
$c_6$	$u^{99} + 3u^{98} + \cdots + 27558u + 10961$
$c_7, c_{11}, c_{12}$	$u^{99} - 3u^{98} + \cdots - 5u^2 + 1$
$c_8$	$u^{99} + u^{98} + \cdots + 2u + 1$
$c_{10}$	$u^{99} + 17u^{98} + \cdots - 745808u - 47873$

### III. Riley Polynomials

Crossings	Riley Polynomials at each crossing
$c_1, c_4$	$y^{99} - 65y^{98} + \cdots - 46y - 1$
$c_2$	$y^{99} + 167y^{98} + \cdots + 15926y - 361$
$c_3$	$y^{99} - 173y^{98} + \cdots + 31500556694y - 1489419649$
$c_5, c_9$	$y^{99} + 59y^{98} + \cdots + 10y - 1$
$c_6$	$y^{99} + 23y^{98} + \cdots - 2411815078y - 120143521$
$c_7, c_{11}, c_{12}$	$y^{99} + 91y^{98} + \cdots + 10y - 1$
$c_8$	$y^{99} + 3y^{98} + \cdots + 66y - 1$
$c_{10}$	$y^{99} + 63y^{98} + \cdots + 18472642594y - 2291824129$