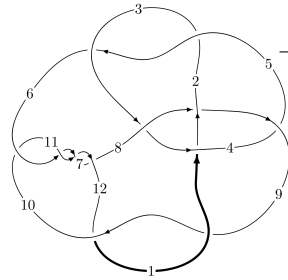
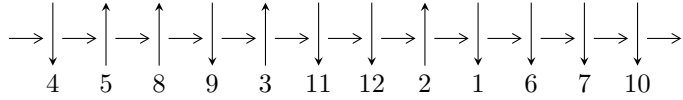


12a₀₈₃₃ (K12a₀₈₃₃)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle 6.92226 \times 10^{23}u^{76} + 2.25852 \times 10^{24}u^{75} + \dots + 3.76421 \times 10^{24}b + 1.44507 \times 10^{24}, \\ - 8.36115 \times 10^{24}u^{76} - 3.47813 \times 10^{25}u^{75} + \dots + 3.76421 \times 10^{24}a + 4.23354 \times 10^{25}, u^{77} + 2u^{76} + \dots + u + 1 \rangle$$

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

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 79 representations.

¹The 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>).

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

I.

$$I_1^u = \langle 6.92 \times 10^{23} u^{76} + 2.26 \times 10^{24} u^{75} + \dots + 3.76 \times 10^{24} b + 1.45 \times 10^{24}, -8.36 \times 10^{24} u^{76} - 3.48 \times 10^{25} u^{75} + \dots + 3.76 \times 10^{24} a + 4.23 \times 10^{25}, u^{77} + 2u^{76} + \dots + u + 1 \rangle$$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

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

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

$$a_3 = \begin{pmatrix} 2.22122u^{76} + 9.24000u^{75} + \dots - 29.9150u - 11.2468 \\ -0.183897u^{76} - 0.599998u^{75} + \dots + 1.78805u - 0.383897 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} 2.46730u^{76} + 6.84009u^{75} + \dots - 19.3082u - 7.80666 \\ 0.0679123u^{76} - 1.39991u^{75} + \dots + 6.03396u + 1.46791 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} -1.93121u^{76} - 8.43999u^{75} + \dots + 27.5519u + 11.3966 \\ 0.264412u^{76} + 0.600009u^{75} + \dots - 1.84779u + 0.464412 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 1.23607u^{76} + 1.79998u^{75} + \dots - 5.48564u - 0.683416 \\ 0.838969u^{76} - 0.0000226859u^{75} + \dots + 0.119485u + 0.838970 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} u^5 - 2u^3 - u \\ u^5 - 3u^3 + u \end{pmatrix}$$

$$a_9 = \begin{pmatrix} u^9 - 4u^7 + 3u^5 + 2u^3 + u \\ u^9 - 5u^7 + 7u^5 - 2u^3 + u \end{pmatrix}$$

(ii) Obstruction class = -1

$$(iii) \text{ Cusp Shapes} = \frac{18898874875970222080511766}{3764208987280068409379969} u^{76} + \frac{23036948754797654651395635}{3764208987280068409379969} u^{75} + \dots + \frac{89792714215852879307532136}{3764208987280068409379969} u + \frac{28083545111696464689731405}{3764208987280068409379969}$$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{77} - 13u^{76} + \dots + 28u - 4$
c_2, c_5	$u^{77} + 3u^{76} + \dots - 28u - 1$
c_3	$u^{77} + 2u^{76} + \dots + 36927u - 10649$
c_4	$u^{77} + 46u^{75} + \dots - 3159u - 521$
c_6, c_7, c_{10} c_{11}	$u^{77} - 2u^{76} + \dots + u - 1$
c_8	$u^{77} - 4u^{76} + \dots - u + 1$
c_9, c_{12}	$u^{77} - 12u^{76} + \dots - 7323u + 937$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{77} + 15y^{76} + \dots + 8y - 16$
c_2, c_5	$y^{77} - 59y^{76} + \dots + 840y - 1$
c_3	$y^{77} + 36y^{76} + \dots + 7037007165y - 113401201$
c_4	$y^{77} + 92y^{76} + \dots + 6188485y - 271441$
c_6, c_7, c_{10} c_{11}	$y^{77} - 84y^{76} + \dots + 9y - 1$
c_8	$y^{77} - 16y^{76} + \dots + 9y - 1$
c_9, c_{12}	$y^{77} + 60y^{76} + \dots - 6663999y - 877969$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.853925 + 0.296160I$ $a = 0.973281 - 0.595252I$ $b = 1.172540 + 0.189613I$	$1.07224 + 1.58898I$	0
$u = 0.853925 - 0.296160I$ $a = 0.973281 + 0.595252I$ $b = 1.172540 - 0.189613I$	$1.07224 - 1.58898I$	0
$u = -0.593838 + 0.645320I$ $a = -0.63075 + 1.51672I$ $b = 1.270780 + 0.133216I$	$7.55124 + 4.72924I$	$0. - 6.30385I$
$u = -0.593838 - 0.645320I$ $a = -0.63075 - 1.51672I$ $b = 1.270780 - 0.133216I$	$7.55124 - 4.72924I$	$0. + 6.30385I$
$u = 0.581242 + 0.631919I$ $a = -1.12909 - 2.01443I$ $b = 1.44071 - 0.50854I$	$8.3310 - 13.1724I$	$0. + 9.15625I$
$u = 0.581242 - 0.631919I$ $a = -1.12909 + 2.01443I$ $b = 1.44071 + 0.50854I$	$8.3310 + 13.1724I$	$0. - 9.15625I$
$u = -0.766915 + 0.349815I$ $a = 0.45233 + 1.81840I$ $b = 1.257950 + 0.389125I$	$1.58579 + 7.91925I$	$-4.00000 - 9.21393I$
$u = -0.766915 - 0.349815I$ $a = 0.45233 - 1.81840I$ $b = 1.257950 - 0.389125I$	$1.58579 - 7.91925I$	$-4.00000 + 9.21393I$
$u = 0.546540 + 0.601133I$ $a = 1.244280 + 0.506121I$ $b = -0.172494 + 1.220390I$	$3.24579 - 7.19707I$	$-1.99256 + 9.26795I$
$u = 0.546540 - 0.601133I$ $a = 1.244280 - 0.506121I$ $b = -0.172494 - 1.220390I$	$3.24579 + 7.19707I$	$-1.99256 - 9.26795I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.511919 + 0.613048I$ $a = 1.43493 + 1.72189I$ $b = -1.55248 + 0.63641I$	$7.52474 - 4.19900I$	$4.30781 + 6.64099I$
$u = 0.511919 - 0.613048I$ $a = 1.43493 - 1.72189I$ $b = -1.55248 - 0.63641I$	$7.52474 + 4.19900I$	$4.30781 - 6.64099I$
$u = -0.401184 + 0.687267I$ $a = -0.832182 + 0.272529I$ $b = 1.287680 - 0.080245I$	$8.12227 - 0.25245I$	$4.74578 - 0.31294I$
$u = -0.401184 - 0.687267I$ $a = -0.832182 - 0.272529I$ $b = 1.287680 + 0.080245I$	$8.12227 + 0.25245I$	$4.74578 + 0.31294I$
$u = 0.411672 + 0.667315I$ $a = -0.830610 - 0.220703I$ $b = 1.44202 + 0.47832I$	$8.83402 + 8.79252I$	$0.88977 - 3.35804I$
$u = 0.411672 - 0.667315I$ $a = -0.830610 + 0.220703I$ $b = 1.44202 - 0.47832I$	$8.83402 - 8.79252I$	$0.88977 + 3.35804I$
$u = -0.529363 + 0.577415I$ $a = -0.135208 - 0.789858I$ $b = -0.209697 - 0.347656I$	$3.14595 + 2.98011I$	$-2.41069 - 2.46896I$
$u = -0.529363 - 0.577415I$ $a = -0.135208 + 0.789858I$ $b = -0.209697 + 0.347656I$	$3.14595 - 2.98011I$	$-2.41069 + 2.46896I$
$u = 0.480416 + 0.616913I$ $a = 0.579023 + 0.909776I$ $b = -1.58087 - 0.58209I$	$7.61770 + 0.01954I$	$4.76574 + 0.17184I$
$u = 0.480416 - 0.616913I$ $a = 0.579023 - 0.909776I$ $b = -1.58087 + 0.58209I$	$7.61770 - 0.01954I$	$4.76574 - 0.17184I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.494713 + 0.592724I$ $a = 3.16136 - 1.21835I$ $b = -1.125500 - 0.016130I$	$5.08899 + 2.02411I$	$-19.3118 - 1.4800I$
$u = -0.494713 - 0.592724I$ $a = 3.16136 + 1.21835I$ $b = -1.125500 + 0.016130I$	$5.08899 - 2.02411I$	$-19.3118 + 1.4800I$
$u = 0.438086 + 0.613550I$ $a = -0.671045 + 0.081730I$ $b = -0.234394 - 1.182410I$	$3.56479 + 3.06303I$	$-0.82722 - 2.95608I$
$u = 0.438086 - 0.613550I$ $a = -0.671045 - 0.081730I$ $b = -0.234394 + 1.182410I$	$3.56479 - 3.06303I$	$-0.82722 + 2.95608I$
$u = -0.454585 + 0.581796I$ $a = -0.700983 + 0.414818I$ $b = -0.299545 + 0.306129I$	$3.36686 + 0.99145I$	$-1.25975 - 4.73968I$
$u = -0.454585 - 0.581796I$ $a = -0.700983 - 0.414818I$ $b = -0.299545 - 0.306129I$	$3.36686 - 0.99145I$	$-1.25975 + 4.73968I$
$u = -0.662313 + 0.211934I$ $a = 0.35497 - 1.59761I$ $b = 0.052783 - 0.855449I$	$-2.18565 + 3.46642I$	$-10.30084 - 8.03918I$
$u = -0.662313 - 0.211934I$ $a = 0.35497 + 1.59761I$ $b = 0.052783 + 0.855449I$	$-2.18565 - 3.46642I$	$-10.30084 + 8.03918I$
$u = 0.582849 + 0.322676I$ $a = -1.21537 - 0.97656I$ $b = 0.305951 - 0.408414I$	$-1.56034 - 0.79420I$	$-10.59198 + 4.32165I$
$u = 0.582849 - 0.322676I$ $a = -1.21537 + 0.97656I$ $b = 0.305951 + 0.408414I$	$-1.56034 + 0.79420I$	$-10.59198 - 4.32165I$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.036520 + 0.599242I$ $a = -0.827030 + 0.013934I$ $b = 1.257970 - 0.282910I$	$3.88684 - 4.68919I$	$2.22512 + 5.21190I$
$u = -0.036520 - 0.599242I$ $a = -0.827030 - 0.013934I$ $b = 1.257970 + 0.282910I$	$3.88684 + 4.68919I$	$2.22512 - 5.21190I$
$u = 0.563481$ $a = -0.745038$ $b = 0.0349557$	-0.922835	-10.6560
$u = 1.42367 + 0.20238I$ $a = 0.304978 - 0.285826I$ $b = 1.311050 + 0.004533I$	$2.29463 - 2.93841I$	0
$u = 1.42367 - 0.20238I$ $a = 0.304978 + 0.285826I$ $b = 1.311050 - 0.004533I$	$2.29463 + 2.93841I$	0
$u = -1.44300 + 0.19292I$ $a = 0.428691 - 0.138349I$ $b = 1.44221 - 0.43358I$	$2.88358 - 5.72307I$	0
$u = -1.44300 - 0.19292I$ $a = 0.428691 + 0.138349I$ $b = 1.44221 + 0.43358I$	$2.88358 + 5.72307I$	0
$u = -0.481253 + 0.252904I$ $a = -0.87479 - 2.48795I$ $b = -1.085940 - 0.463047I$	$1.84563 + 2.21443I$	$-1.06316 - 9.09042I$
$u = -0.481253 - 0.252904I$ $a = -0.87479 + 2.48795I$ $b = -1.085940 + 0.463047I$	$1.84563 - 2.21443I$	$-1.06316 + 9.09042I$
$u = -1.48480 + 0.16334I$ $a = -0.928276 + 0.982359I$ $b = -0.330290 + 1.148720I$	$-2.68476 - 0.33795I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.48480 - 0.16334I$ $a = -0.928276 - 0.982359I$ $b = -0.330290 - 1.148720I$	$-2.68476 + 0.33795I$	0
$u = 1.49604$ $a = -1.27137$ $b = -1.51544$	-3.24017	0
$u = 0.492260 + 0.077362I$ $a = -2.26092 + 6.41672I$ $b = -0.953862 + 0.013143I$	$0.798661 - 0.174787I$	$27.8903 - 10.4954I$
$u = 0.492260 - 0.077362I$ $a = -2.26092 - 6.41672I$ $b = -0.953862 - 0.013143I$	$0.798661 + 0.174787I$	$27.8903 + 10.4954I$
$u = 1.50405 + 0.15591I$ $a = -1.037770 - 0.828109I$ $b = -0.415857 - 0.300870I$	$-3.06301 - 3.56838I$	0
$u = 1.50405 - 0.15591I$ $a = -1.037770 + 0.828109I$ $b = -0.415857 + 0.300870I$	$-3.06301 + 3.56838I$	0
$u = -1.50575 + 0.17891I$ $a = -0.822676 - 0.369551I$ $b = -1.61992 + 0.52632I$	$1.10913 + 2.81557I$	0
$u = -1.50575 - 0.17891I$ $a = -0.822676 + 0.369551I$ $b = -1.61992 - 0.52632I$	$1.10913 - 2.81557I$	0
$u = 1.51956 + 0.04330I$ $a = -1.33810 + 1.94670I$ $b = -1.010310 + 0.705360I$	$-4.84400 - 3.13283I$	0
$u = 1.51956 - 0.04330I$ $a = -1.33810 - 1.94670I$ $b = -1.010310 - 0.705360I$	$-4.84400 + 3.13283I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.51829 + 0.17105I$ $a = 1.87369 + 1.53109I$ $b = -1.129620 + 0.048557I$	$-1.54754 - 4.74455I$	0
$u = 1.51829 - 0.17105I$ $a = 1.87369 - 1.53109I$ $b = -1.129620 - 0.048557I$	$-1.54754 + 4.74455I$	0
$u = -1.52209 + 0.18329I$ $a = -0.04272 - 2.17243I$ $b = -1.52902 - 0.69215I$	$0.82414 + 7.06092I$	0
$u = -1.52209 - 0.18329I$ $a = -0.04272 + 2.17243I$ $b = -1.52902 + 0.69215I$	$0.82414 - 7.06092I$	0
$u = -1.53326 + 0.01568I$ $a = -0.95067 - 3.21890I$ $b = -0.921461 - 0.114945I$	$-6.07296 + 0.47946I$	0
$u = -1.53326 - 0.01568I$ $a = -0.95067 + 3.21890I$ $b = -0.921461 + 0.114945I$	$-6.07296 - 0.47946I$	0
$u = 1.53565 + 0.17005I$ $a = -0.246452 + 0.988043I$ $b = -0.141987 + 0.396231I$	$-3.70464 - 5.66720I$	0
$u = 1.53565 - 0.17005I$ $a = -0.246452 - 0.988043I$ $b = -0.141987 - 0.396231I$	$-3.70464 + 5.66720I$	0
$u = -1.53946 + 0.18227I$ $a = 0.94700 - 1.54313I$ $b = -0.121748 - 1.253750I$	$-3.66455 + 10.03570I$	0
$u = -1.53946 - 0.18227I$ $a = 0.94700 + 1.54313I$ $b = -0.121748 + 1.253750I$	$-3.66455 - 10.03570I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.55599 + 0.08870I$ $a = -0.40942 + 1.36638I$ $b = 0.502249 + 0.525672I$	$-8.78367 + 2.27960I$	0
$u = -1.55599 - 0.08870I$ $a = -0.40942 - 1.36638I$ $b = 0.502249 - 0.525672I$	$-8.78367 - 2.27960I$	0
$u = -1.55314 + 0.19785I$ $a = 0.12361 + 2.22057I$ $b = 1.43690 + 0.53476I$	$1.2566 + 16.2112I$	0
$u = -1.55314 - 0.19785I$ $a = 0.12361 - 2.22057I$ $b = 1.43690 - 0.53476I$	$1.2566 - 16.2112I$	0
$u = -1.56614$ $a = -0.226660$ $b = 0.197297$	-8.25195	0
$u = 1.56818 + 0.04901I$ $a = 0.31464 + 1.98559I$ $b = 0.176625 + 0.965287I$	$-9.71978 - 4.36105I$	0
$u = 1.56818 - 0.04901I$ $a = 0.31464 - 1.98559I$ $b = 0.176625 - 0.965287I$	$-9.71978 + 4.36105I$	0
$u = 1.55754 + 0.20538I$ $a = 0.32466 - 1.44758I$ $b = 1.252100 - 0.181265I$	$0.42304 - 7.85842I$	0
$u = 1.55754 - 0.20538I$ $a = 0.32466 + 1.44758I$ $b = 1.252100 + 0.181265I$	$0.42304 + 7.85842I$	0
$u = 1.59711 + 0.08248I$ $a = 1.18450 - 1.70696I$ $b = 1.220860 - 0.468134I$	$-6.42327 - 9.43760I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.59711 - 0.08248I$ $a = 1.18450 + 1.70696I$ $b = 1.220860 + 0.468134I$	$-6.42327 + 9.43760I$	0
$u = 0.036693 + 0.376347I$ $a = -0.936023 - 0.126763I$ $b = -0.072076 + 0.554674I$	$-0.11372 - 1.47103I$	$-2.11863 + 4.15045I$
$u = 0.036693 - 0.376347I$ $a = -0.936023 + 0.126763I$ $b = -0.072076 - 0.554674I$	$-0.11372 + 1.47103I$	$-2.11863 - 4.15045I$
$u = -1.62917 + 0.04871I$ $a = 1.266120 + 0.059325I$ $b = 1.042950 - 0.146994I$	$-7.44987 - 0.45114I$	0
$u = -1.62917 - 0.04871I$ $a = 1.266120 - 0.059325I$ $b = 1.042950 + 0.146994I$	$-7.44987 + 0.45114I$	0
$u = -0.218991 + 0.259933I$ $a = -0.526450 - 0.951049I$ $b = -1.224660 + 0.170875I$	$2.56830 - 0.25125I$	$2.88791 - 3.66761I$
$u = -0.218991 - 0.259933I$ $a = -0.526450 + 0.951049I$ $b = -1.224660 - 0.170875I$	$2.56830 + 0.25125I$	$2.88791 + 3.66761I$

$$\text{II. } I_2^u = \langle b - 1, a - u - 3, u^2 + u - 1 \rangle$$

(i) Arc colorings

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

$$a_{11} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_7 = \begin{pmatrix} 1 \\ -u + 1 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u \\ -u + 1 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} u + 3 \\ 1 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} u + 2 \\ 0 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} u + 4 \\ 1 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

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

$$a_1 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 2u \\ u \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = 1

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.618034$ $a = 3.61803$ $b = 1.00000$	0.657974	1.00000
$u = -1.61803$ $a = 1.38197$ $b = 1.00000$	-7.23771	1.00000

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$u^2(u^{77} - 13u^{76} + \dots + 28u - 4)$
c_2	$((u + 1)^2)(u^{77} + 3u^{76} + \dots - 28u - 1)$
c_3	$(u^2 - u - 1)(u^{77} + 2u^{76} + \dots + 36927u - 10649)$
c_4	$(u^2 - u - 1)(u^{77} + 46u^{75} + \dots - 3159u - 521)$
c_5	$((u - 1)^2)(u^{77} + 3u^{76} + \dots - 28u - 1)$
c_6, c_7	$(u^2 + u - 1)(u^{77} - 2u^{76} + \dots + u - 1)$
c_8	$(u^2 + u - 1)(u^{77} - 4u^{76} + \dots - u + 1)$
c_9	$(u^2 + u - 1)(u^{77} - 12u^{76} + \dots - 7323u + 937)$
c_{10}, c_{11}	$(u^2 - u - 1)(u^{77} - 2u^{76} + \dots + u - 1)$
c_{12}	$(u^2 - u - 1)(u^{77} - 12u^{76} + \dots - 7323u + 937)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$y^2(y^{77} + 15y^{76} + \dots + 8y - 16)$
c_2, c_5	$((y - 1)^2)(y^{77} - 59y^{76} + \dots + 840y - 1)$
c_3	$(y^2 - 3y + 1)(y^{77} + 36y^{76} + \dots + 7.03701 \times 10^9 y - 1.13401 \times 10^8)$
c_4	$(y^2 - 3y + 1)(y^{77} + 92y^{76} + \dots + 6188485y - 271441)$
c_6, c_7, c_{10} c_{11}	$(y^2 - 3y + 1)(y^{77} - 84y^{76} + \dots + 9y - 1)$
c_8	$(y^2 - 3y + 1)(y^{77} - 16y^{76} + \dots + 9y - 1)$
c_9, c_{12}	$(y^2 - 3y + 1)(y^{77} + 60y^{76} + \dots - 6663999y - 877969)$