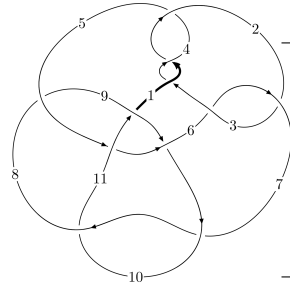
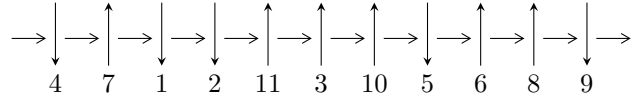


11a₂₅₁ (K11a₂₅₁)



A knot diagram¹

Linearized knot diagram



Solving Sequence

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

Ideals for irreducible components² of X_{par}

$$I_1^u = \langle -5.68810 \times 10^{156} u^{70} + 1.55856 \times 10^{157} u^{69} + \dots + 7.93791 \times 10^{157} b + 3.59478 \times 10^{157}, \\ 5.59936 \times 10^{157} u^{70} - 8.12165 \times 10^{157} u^{69} + \dots + 7.93791 \times 10^{157} a - 4.78496 \times 10^{158}, u^{71} - 2u^{70} + \dots - 10 \rangle$$

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

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 76 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.

$$\text{I. } I_1^u = \langle -5.69 \times 10^{156} u^{70} + 1.56 \times 10^{157} u^{69} + \dots + 7.94 \times 10^{157} b + 3.59 \times 10^{157}, 5.60 \times 10^{157} u^{70} - 8.12 \times 10^{157} u^{69} + \dots + 7.94 \times 10^{157} a - 4.78 \times 10^{158}, u^{71} - 2u^{70} + \dots - 10u + 1 \rangle$$

(i) Arc colorings

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

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

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

$$a_3 = \begin{pmatrix} -0.705395u^{70} + 1.02315u^{69} + \dots - 20.4760u + 6.02799 \\ 0.0716575u^{70} - 0.196344u^{69} + \dots + 0.865234u - 0.452863 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} -0.777052u^{70} + 1.21949u^{69} + \dots - 21.3412u + 6.48085 \\ 0.0716575u^{70} - 0.196344u^{69} + \dots + 0.865234u - 0.452863 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} 0.821521u^{70} - 0.920115u^{69} + \dots + 15.4811u - 2.91710 \\ -0.201387u^{70} + 0.381284u^{69} + \dots - 10.7628u + 1.69056 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} 0.801915u^{70} - 0.815848u^{69} + \dots + 16.3688u - 3.09726 \\ -0.209903u^{70} + 0.426666u^{69} + \dots - 10.5453u + 1.57546 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -0.451816u^{70} + 0.954485u^{69} + \dots - 17.7677u + 5.06906 \\ -0.0186479u^{70} + 0.0169092u^{69} + \dots - 2.19688u + 0.0640132 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -0.725017u^{70} + 1.65402u^{69} + \dots + 4.00112u - 2.27250 \\ 0.271778u^{70} - 0.315974u^{69} + \dots + 9.57483u - 0.629811 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0982857u^{70} - 0.0430280u^{69} + \dots + 3.63403u - 1.21756 \\ 0.0186479u^{70} - 0.0169092u^{69} + \dots + 2.19688u - 0.0640132 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.0982857u^{70} - 0.0430280u^{69} + \dots + 3.63403u - 1.21756 \\ 0.0186479u^{70} - 0.0169092u^{69} + \dots + 2.19688u - 0.0640132 \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes = $-3.02243u^{70} + 6.21438u^{69} + \dots + 39.3412u - 7.45678$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_3, c_4	$u^{71} - 6u^{70} + \dots + 8u - 1$
c_2, c_6	$u^{71} - u^{70} + \dots + 160u - 32$
c_5	$u^{71} + 6u^{70} + \dots + 2u + 1$
c_7, c_{10}	$u^{71} + 2u^{70} + \dots - 10u - 1$
c_8	$u^{71} + 2u^{70} + \dots - 26u - 71$
c_9	$u^{71} - 2u^{70} + \dots + 1044u + 216$
c_{11}	$u^{71} - 12u^{70} + \dots + 2u - 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4	$y^{71} - 64y^{70} + \dots + 192y - 1$
c_2, c_6	$y^{71} + 33y^{70} + \dots - 4608y - 1024$
c_5	$y^{71} - 12y^{70} + \dots + 6y - 1$
c_7, c_{10}	$y^{71} - 48y^{70} + \dots + 10y - 1$
c_8	$y^{71} + 72y^{70} + \dots - 272958y - 5041$
c_9	$y^{71} + 48y^{70} + \dots + 5221584y - 46656$
c_{11}	$y^{71} + 60y^{69} + \dots + 10y - 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.958690 + 0.052610I$		
$a = 1.12357 + 3.37661I$	$-0.821815 - 0.287086I$	$15.6399 - 24.5037I$
$b = -0.753769 - 0.149844I$		
$u = -0.958690 - 0.052610I$		
$a = 1.12357 - 3.37661I$	$-0.821815 + 0.287086I$	$15.6399 + 24.5037I$
$b = -0.753769 + 0.149844I$		
$u = -1.039170 + 0.068699I$		
$a = -3.61770 + 0.29771I$	$1.53422 - 1.77853I$	0
$b = 0.418183 - 0.830193I$		
$u = -1.039170 - 0.068699I$		
$a = -3.61770 - 0.29771I$	$1.53422 + 1.77853I$	0
$b = 0.418183 + 0.830193I$		
$u = 0.936141 + 0.181892I$		
$a = -0.083967 + 0.975080I$	$-0.50220 + 3.12016I$	$-4.96274 - 11.92067I$
$b = -0.091987 + 1.395920I$		
$u = 0.936141 - 0.181892I$		
$a = -0.083967 - 0.975080I$	$-0.50220 - 3.12016I$	$-4.96274 + 11.92067I$
$b = -0.091987 - 1.395920I$		
$u = 0.090337 + 1.044210I$		
$a = -0.026334 + 0.752549I$	$-3.94869 - 4.27443I$	0
$b = 1.049030 + 0.353850I$		
$u = 0.090337 - 1.044210I$		
$a = -0.026334 - 0.752549I$	$-3.94869 + 4.27443I$	0
$b = 1.049030 - 0.353850I$		
$u = 1.044140 + 0.187508I$		
$a = -0.935314 + 0.664478I$	$1.70771 + 3.92061I$	0
$b = 0.78926 + 1.18254I$		
$u = 1.044140 - 0.187508I$		
$a = -0.935314 - 0.664478I$	$1.70771 - 3.92061I$	0
$b = 0.78926 - 1.18254I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.551309 + 0.934929I$ $a = -0.81004 + 1.24306I$ $b = 0.116001 + 1.363920I$	$-10.36010 - 0.43943I$	0
$u = 0.551309 - 0.934929I$ $a = -0.81004 - 1.24306I$ $b = 0.116001 - 1.363920I$	$-10.36010 + 0.43943I$	0
$u = 0.117174 + 0.888965I$ $a = 0.42606 - 1.98602I$ $b = 0.182154 - 0.954080I$	$-2.76633 - 1.81907I$	$-5.04908 + 2.94377I$
$u = 0.117174 - 0.888965I$ $a = 0.42606 + 1.98602I$ $b = 0.182154 + 0.954080I$	$-2.76633 + 1.81907I$	$-5.04908 - 2.94377I$
$u = -0.238708 + 0.856602I$ $a = -0.033528 - 0.750003I$ $b = -0.555330 - 0.426705I$	$0.63691 - 2.06340I$	$4.30464 + 4.04645I$
$u = -0.238708 - 0.856602I$ $a = -0.033528 + 0.750003I$ $b = -0.555330 + 0.426705I$	$0.63691 + 2.06340I$	$4.30464 - 4.04645I$
$u = 0.871168 + 0.127070I$ $a = 0.768608 - 0.123027I$ $b = -1.078050 + 0.845687I$	$-1.94802 + 1.61598I$	$-10.03099 - 8.04874I$
$u = 0.871168 - 0.127070I$ $a = 0.768608 + 0.123027I$ $b = -1.078050 - 0.845687I$	$-1.94802 - 1.61598I$	$-10.03099 + 8.04874I$
$u = -1.111760 + 0.154509I$ $a = 2.52899 - 0.19796I$ $b = -0.497375 + 1.156290I$	$-3.73969 - 4.87336I$	0
$u = -1.111760 - 0.154509I$ $a = 2.52899 + 0.19796I$ $b = -0.497375 - 1.156290I$	$-3.73969 + 4.87336I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.968505 + 0.574658I$ $a = 0.556618 - 1.072570I$ $b = -0.15556 - 1.52316I$	$-8.97886 + 5.87062I$	0
$u = 0.968505 - 0.574658I$ $a = 0.556618 + 1.072570I$ $b = -0.15556 + 1.52316I$	$-8.97886 - 5.87062I$	0
$u = 0.016654 + 1.134760I$ $a = 0.01069 + 1.54493I$ $b = -0.504028 + 1.050930I$	$-1.17091 - 6.36314I$	0
$u = 0.016654 - 1.134760I$ $a = 0.01069 - 1.54493I$ $b = -0.504028 - 1.050930I$	$-1.17091 + 6.36314I$	0
$u = -1.16582$ $a = 0.452000$ $b = 0.259845$	2.31401	0
$u = 0.827970$ $a = 0.602565$ $b = -1.45559$	-2.44443	-13.2680
$u = -0.795879 + 0.090569I$ $a = 1.76698 - 2.15625I$ $b = 0.158109 - 0.674265I$	$0.733207 - 1.164170I$	$5.75824 + 3.22185I$
$u = -0.795879 - 0.090569I$ $a = 1.76698 + 2.15625I$ $b = 0.158109 + 0.674265I$	$0.733207 + 1.164170I$	$5.75824 - 3.22185I$
$u = 1.152090 + 0.338633I$ $a = 1.033990 - 0.728304I$ $b = -0.82605 - 1.20952I$	$-3.47932 + 8.87997I$	0
$u = 1.152090 - 0.338633I$ $a = 1.033990 + 0.728304I$ $b = -0.82605 + 1.20952I$	$-3.47932 - 8.87997I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.716396 + 0.338710I$ $a = -1.82350 - 1.16977I$ $b = -0.371326 - 1.151650I$	$-4.63878 + 3.29846I$	$-3.31669 - 7.32300I$
$u = -0.716396 - 0.338710I$ $a = -1.82350 + 1.16977I$ $b = -0.371326 + 1.151650I$	$-4.63878 - 3.29846I$	$-3.31669 + 7.32300I$
$u = 1.222350 + 0.171009I$ $a = -0.244405 + 0.071523I$ $b = 0.967998 + 0.212799I$	$4.87893 + 2.71275I$	0
$u = 1.222350 - 0.171009I$ $a = -0.244405 - 0.071523I$ $b = 0.967998 - 0.212799I$	$4.87893 - 2.71275I$	0
$u = -1.247410 + 0.331147I$ $a = -1.29926 - 2.06002I$ $b = 0.422840 - 0.530363I$	$1.050550 - 0.525213I$	0
$u = -1.247410 - 0.331147I$ $a = -1.29926 + 2.06002I$ $b = 0.422840 + 0.530363I$	$1.050550 + 0.525213I$	0
$u = 0.051066 + 1.301090I$ $a = 0.022365 - 1.283720I$ $b = 0.640749 - 1.227980I$	$-6.73040 - 10.34400I$	0
$u = 0.051066 - 1.301090I$ $a = 0.022365 + 1.283720I$ $b = 0.640749 + 1.227980I$	$-6.73040 + 10.34400I$	0
$u = -0.703062 + 1.112770I$ $a = 0.146447 + 0.850843I$ $b = 0.300612 + 1.059860I$	$-3.63710 - 0.29930I$	0
$u = -0.703062 - 1.112770I$ $a = 0.146447 - 0.850843I$ $b = 0.300612 - 1.059860I$	$-3.63710 + 0.29930I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.215620 + 0.579320I$		
$a = -0.551017 + 0.353859I$	$0.57965 - 2.48080I$	0
$b = 0.782344 + 0.411126I$		
$u = -1.215620 - 0.579320I$		
$a = -0.551017 - 0.353859I$	$0.57965 + 2.48080I$	0
$b = 0.782344 - 0.411126I$		
$u = 1.267920 + 0.491162I$		
$a = -0.82403 + 1.37930I$	$0.83262 + 6.84654I$	0
$b = 0.434959 + 1.171370I$		
$u = 1.267920 - 0.491162I$		
$a = -0.82403 - 1.37930I$	$0.83262 - 6.84654I$	0
$b = 0.434959 - 1.171370I$		
$u = 1.331280 + 0.393498I$		
$a = 0.104491 - 0.201021I$	$5.39522 + 6.50016I$	0
$b = -0.919240 + 0.397727I$		
$u = 1.331280 - 0.393498I$		
$a = 0.104491 + 0.201021I$	$5.39522 - 6.50016I$	0
$b = -0.919240 - 0.397727I$		
$u = 1.303720 + 0.536688I$		
$a = -0.094492 + 0.280375I$	$-0.14862 + 9.86900I$	0
$b = 1.204060 - 0.543396I$		
$u = 1.303720 - 0.536688I$		
$a = -0.094492 - 0.280375I$	$-0.14862 - 9.86900I$	0
$b = 1.204060 + 0.543396I$		
$u = 1.35249 + 0.54752I$		
$a = 0.99301 - 1.24253I$	$3.01535 + 12.24190I$	0
$b = -0.639775 - 1.172900I$		
$u = 1.35249 - 0.54752I$		
$a = 0.99301 + 1.24253I$	$3.01535 - 12.24190I$	0
$b = -0.639775 + 1.172900I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.085901 + 0.499257I$ $a = -1.14561 + 1.25252I$ $b = -0.563000 + 1.270970I$	$-6.53398 - 5.54394I$	$-4.50504 + 1.63762I$
$u = 0.085901 - 0.499257I$ $a = -1.14561 - 1.25252I$ $b = -0.563000 - 1.270970I$	$-6.53398 + 5.54394I$	$-4.50504 - 1.63762I$
$u = -1.34861 + 0.66108I$ $a = 0.80494 + 1.17952I$ $b = -0.542577 + 0.884808I$	$3.42139 - 4.04641I$	0
$u = -1.34861 - 0.66108I$ $a = 0.80494 - 1.17952I$ $b = -0.542577 - 0.884808I$	$3.42139 + 4.04641I$	0
$u = 1.49354 + 0.21546I$ $a = 0.0543163 + 0.1174420I$ $b = 0.040910 - 0.635562I$	$3.76322 + 4.31820I$	0
$u = 1.49354 - 0.21546I$ $a = 0.0543163 - 0.1174420I$ $b = 0.040910 + 0.635562I$	$3.76322 - 4.31820I$	0
$u = 1.39546 + 0.60916I$ $a = -1.01075 + 1.10984I$ $b = 0.77537 + 1.24885I$	$-2.4732 + 16.9235I$	0
$u = 1.39546 - 0.60916I$ $a = -1.01075 - 1.10984I$ $b = 0.77537 - 1.24885I$	$-2.4732 - 16.9235I$	0
$u = -1.48233 + 0.37826I$ $a = 0.217114 - 0.286842I$ $b = -0.550290 - 0.713216I$	$3.94019 + 0.36090I$	0
$u = -1.48233 - 0.37826I$ $a = 0.217114 + 0.286842I$ $b = -0.550290 + 0.713216I$	$3.94019 - 0.36090I$	0

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.366011 + 0.204704I$		
$a = 1.88485 - 0.59402I$	$0.638942 - 1.236310I$	$4.36186 + 4.95807I$
$b = 0.363096 - 0.475061I$		
$u = -0.366011 - 0.204704I$		
$a = 1.88485 + 0.59402I$	$0.638942 + 1.236310I$	$4.36186 - 4.95807I$
$b = 0.363096 + 0.475061I$		
$u = -1.41055 + 0.85382I$		
$a = -0.682852 - 0.955217I$	$-1.60491 - 7.59190I$	0
$b = 0.572860 - 1.122140I$		
$u = -1.41055 - 0.85382I$		
$a = -0.682852 + 0.955217I$	$-1.60491 + 7.59190I$	0
$b = 0.572860 + 1.122140I$		
$u = 0.146576 + 0.246793I$		
$a = 3.86257 - 1.93742I$	$-2.06670 - 0.96031I$	$-7.01026 - 0.44637I$
$b = -0.384908 - 0.642002I$		
$u = 0.146576 - 0.246793I$		
$a = 3.86257 + 1.93742I$	$-2.06670 + 0.96031I$	$-7.01026 + 0.44637I$
$b = -0.384908 + 0.642002I$		
$u = -1.73227 + 0.32166I$		
$a = -0.133229 + 0.168591I$	$-0.67110 + 3.32518I$	0
$b = 0.470368 + 1.055660I$		
$u = -1.73227 - 0.32166I$		
$a = -0.133229 - 0.168591I$	$-0.67110 - 3.32518I$	0
$b = 0.470368 - 1.055660I$		
$u = 0.057931 + 0.208385I$		
$a = 2.79535 - 0.71729I$	$-0.62570 - 2.03170I$	$-1.27918 + 2.72742I$
$b = 0.342943 - 0.988238I$		
$u = 0.057931 - 0.208385I$		
$a = 2.79535 + 0.71729I$	$-0.62570 + 2.03170I$	$-1.27918 - 2.72742I$
$b = 0.342943 + 0.988238I$		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.159227$		
$a = 4.37555$	-2.81001	-3.04700
$b = -1.00143$		

$$\text{II. } I_2^u = \langle b, -u^4 + 2u^3 + u^2 + a - 2u - 1, u^5 - u^4 - 2u^3 + u^2 + u + 1 \rangle$$

(i) Arc colorings

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

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

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

$$a_3 = \begin{pmatrix} u^4 - 2u^3 - u^2 + 2u + 1 \\ 0 \end{pmatrix}$$

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

$$a_2 = \begin{pmatrix} u^4 - 2u^3 - u^2 + 2u + 1 \\ 0 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} -u^4 + u^2 + 1 \\ u^4 + u^3 - u^2 - 2u - 1 \end{pmatrix}$$

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

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

$$a_1 = \begin{pmatrix} u^4 - u^2 - 1 \\ -u^4 - u^3 + u^2 + 2u + 1 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} u^4 - u^2 - 1 \\ -u^4 - u^3 + u^2 + 2u + 1 \end{pmatrix}$$

(ii) Obstruction class = 1

(iii) Cusp Shapes = $-3u^4 - u^3 + 2u^2 + 10u + 5$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.21774$ $a = 2.89210$ $b = 0$	0.756147	-9.00270
$u = -0.309916 + 0.549911I$ $a = 0.01014 + 1.59703I$ $b = 0$	$-1.31583 - 1.53058I$	$1.45754 + 4.40323I$
$u = -0.309916 - 0.549911I$ $a = 0.01014 - 1.59703I$ $b = 0$	$-1.31583 + 1.53058I$	$1.45754 - 4.40323I$
$u = 1.41878 + 0.21917I$ $a = 0.043806 - 0.365575I$ $b = 0$	$4.22763 + 4.40083I$	$10.04378 - 5.20937I$
$u = 1.41878 - 0.21917I$ $a = 0.043806 + 0.365575I$ $b = 0$	$4.22763 - 4.40083I$	$10.04378 + 5.20937I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^5)(u^{71} - 6u^{70} + \dots + 8u - 1)$
c_2, c_6	$u^5(u^{71} - u^{70} + \dots + 160u - 32)$
c_3, c_4	$((u+1)^5)(u^{71} - 6u^{70} + \dots + 8u - 1)$
c_5	$(u^5 + 3u^4 + 4u^3 + u^2 - u - 1)(u^{71} + 6u^{70} + \dots + 2u + 1)$
c_7	$(u^5 - u^4 - 2u^3 + u^2 + u + 1)(u^{71} + 2u^{70} + \dots - 10u - 1)$
c_8	$(u^5 - u^4 + 2u^3 - u^2 + u - 1)(u^{71} + 2u^{70} + \dots - 26u - 71)$
c_9	$(u^5 + u^4 - 2u^3 - u^2 + u - 1)(u^{71} - 2u^{70} + \dots + 1044u + 216)$
c_{10}	$(u^5 + u^4 - 2u^3 - u^2 + u - 1)(u^{71} + 2u^{70} + \dots - 10u - 1)$
c_{11}	$(u^5 - u^4 + 2u^3 - u^2 + u - 1)(u^{71} - 12u^{70} + \dots + 2u - 1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1, c_3, c_4	$((y - 1)^5)(y^{71} - 64y^{70} + \dots + 192y - 1)$
c_2, c_6	$y^5(y^{71} + 33y^{70} + \dots - 4608y - 1024)$
c_5	$(y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1)(y^{71} - 12y^{70} + \dots + 6y - 1)$
c_7, c_{10}	$(y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1)(y^{71} - 48y^{70} + \dots + 10y - 1)$
c_8	$(y^5 + 3y^4 + 4y^3 + y^2 - y - 1)(y^{71} + 72y^{70} + \dots - 272958y - 5041)$
c_9	$(y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1)(y^{71} + 48y^{70} + \dots + 5221584y - 46656)$
c_{11}	$(y^5 + 3y^4 + 4y^3 + y^2 - y - 1)(y^{71} + 60y^{69} + \dots + 10y - 1)$