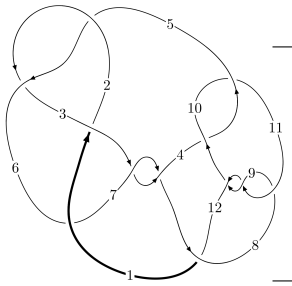
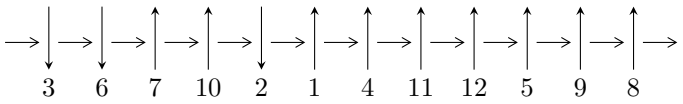
$12a_{0240}$ $(K12a_{0240})$



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$I_1^u = \langle 43u^{91} - 1146u^{90} + \cdots + 32b + 579,\ 141u^{91} - 878u^{90} + \cdots + 4a + 144,\ u^{92} - 7u^{91} + \cdots + 3u - 1 \rangle$
$I_2^u = \langle b^6 + b^5 - b^4 - 2b^3 + b + 1,\ a,\ u + 1 \rangle$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 98 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. $I_1^u = \langle 43u^{91} - 1146u^{90} + \cdots + 32b + 579,\ 141u^{91} - 878u^{90} + \cdots + 4a + 144,\ u^{92} - 7u^{91} + \cdots + 3u - 1\rangle$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_9 = \begin{pmatrix} 1 \\ -u^2 \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} -\frac{141}{4}u^{91} + \frac{439}{2}u^{90} + \cdots + 80u - 36 \\ -1.34375u^{91} + 35.8125u^{90} + \cdots + 26.1875u - 18.0938 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} -u^2 + 1 \\ u^4 - 2u^2 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} \frac{259}{2}u^{91} - 723u^{90} + \cdots - \frac{407}{2}u + \frac{359}{4} \\ 84.1563u^{91} - 414.438u^{90} + \cdots - 88.5625u + 26.4063 \end{pmatrix}$$

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

$$a_7 = \begin{pmatrix} -u^9 + 4u^7 + 2u^6 - 5u^5 - 6u^4 + 4u^2 + 3u + 2 \\ 0.0312500u^{91} - 0.187500u^{90} + \cdots - 1.06250u + 0.0312500 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 73.0313u^{91} - 436.188u^{90} + \cdots - 135.313u + 68.5313 \\ 367.031u^{91} - 2093.25u^{90} + \cdots - 628.625u + 279.844 \end{pmatrix}$$

$$a_6 = \begin{pmatrix} -0.0312500u^{91} + 0.187500u^{90} + \cdots + 3.06250u + 1.96875 \\ 0.0312500u^{91} - 0.187500u^{90} + \cdots - 1.06250u + 0.0312500 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} 2.68750u^{91} - 15.9375u^{90} + \cdots + 4.81250u + 3.50000 \\ 15.4688u^{91} - 91.0625u^{90} + \cdots - 29.1875u + 13.8438 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{3517}{8}u^{91} + \frac{39449}{16}u^{90} + \cdots + \frac{11229}{16}u - \frac{4837}{16}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{92}+42u^{91}+\cdots+6u+1$
c_2, c_5	$u^{92}+2u^{91}+\cdots-2u+1$
c_3, c_7	$u^{92}-2u^{91}+\cdots+110u+25$
c_4, c_{10}	$u^{92}-u^{91}+\cdots+128u-64$
c_6	$u^{92}+6u^{91}+\cdots-18u-5$
c_8, c_9, c_{11}	$u^{92}+7u^{91}+\cdots-3u-1$
c_{12}	$u^{92}-39u^{91}+\cdots-45056u+4096$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{92} + 18y^{91} + \cdots - 50y + 1$
c_2, c_5	$y^{92} - 42y^{91} + \cdots - 6y + 1$
c_3, c_7	$y^{92} - 66y^{91} + \cdots + 23850y + 625$
c_4, c_{10}	$y^{92} - 39y^{91} + \cdots - 45056y + 4096$
c_6	$y^{92} + 6y^{91} + \cdots + 1086y + 25$
c_8, c_9, c_{11}	$y^{92} - 81y^{91} + \cdots + y + 1$
c_{12}	$y^{92} + 17y^{91} + \cdots - 201326592y + 16777216$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.855893+0.527606I$ $a=\ \ 0.393530-0.308819I$ $b=\ \ 1.238450-0.035861I$	$5.58340-0.40937I$	0
$u=-0.855893-0.527606I$ $a=\ \ 0.393530+0.308819I$ $b=\ \ 1.238450+0.035861I$	$5.58340+0.40937I$	0
$u=-0.823622+0.543416I$ $a=-0.299409+0.297378I$ $b=-1.200290+0.200271I$	$3.94188-5.47839I$	0
$u=-0.823622-0.543416I$ $a=-0.299409-0.297378I$ $b=-1.200290-0.200271I$	$3.94188+5.47839I$	0
$u=-0.934785+0.428419I$ $a=-0.640037+0.141332I$ $b=-0.946030-0.426464I$	$0.419646+0.395087I$	0
$u=-0.934785-0.428419I$ $a=-0.640037-0.141332I$ $b=-0.946030+0.426464I$	$0.419646-0.395087I$	0
$u=-0.926309+0.516475I$ $a=\ \ 0.581393-0.353795I$ $b=\ \ 1.344830+0.308771I$	$5.25124+2.21296I$	0
$u=-0.926309-0.516475I$ $a=\ \ 0.581393+0.353795I$ $b=\ \ 1.344830-0.308771I$	$5.25124-2.21296I$	0
$u=-0.951668+0.520377I$ $a=-0.650526+0.382532I$ $b=-1.40538-0.44067I$	$3.32536+7.33336I$	0
$u=-0.951668-0.520377I$ $a=-0.650526-0.382532I$ $b=-1.40538+0.44067I$	$3.32536-7.33336I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.257095+0.850924I$ $a=-1.05101+1.49174I$ $b=-1.50653+0.51583I$	$1.19521-12.17710I$	0
$u=-0.257095-0.850924I$ $a=-1.05101-1.49174I$ $b=-1.50653-0.51583I$	$1.19521+12.17710I$	0
$u=-0.266178+0.838902I$ $a=\ \ 1.01110-1.43448I$ $b=\ \ 1.41908-0.41643I$	$3.21993-7.00055I$	0
$u=-0.266178-0.838902I$ $a=\ \ 1.01110+1.43448I$ $b=\ \ 1.41908+0.41643I$	$3.21993+7.00055I$	0
$u=-0.298969+0.807596I$ $a=\ \ 0.91610-1.25406I$ $b=\ \ 1.201580-0.120872I$	$3.86636-4.28759I$	0
$u=-0.298969-0.807596I$ $a=\ \ 0.91610+1.25406I$ $b=\ \ 1.201580+0.120872I$	$3.86636+4.28759I$	0
$u=-0.320326+0.790880I$ $a=-0.86648+1.14685I$ $b=-1.082220-0.039888I$	$2.40332+0.79509I$	0
$u=-0.320326-0.790880I$ $a=-0.86648-1.14685I$ $b=-1.082220+0.039888I$	$2.40332-0.79509I$	0
$u=-0.238388+0.811798I$ $a=-0.85620+1.51375I$ $b=-1.149650+0.585085I$	$-1.74435-4.87706I$	0
$u=-0.238388-0.811798I$ $a=-0.85620-1.51375I$ $b=-1.149650-0.585085I$	$-1.74435+4.87706I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.126370+0.322522I$ $a=\ \ 0.984386+0.298675I$ $b=\ \ 0.160829+0.964145I$	$-1.59588+2.31274I$	0
$u=-1.126370-0.322522I$ $a=\ \ 0.984386-0.298675I$ $b=\ \ 0.160829-0.964145I$	$-1.59588-2.31274I$	0
$u=-1.158340+0.231833I$ $a=-0.817877-0.574536I$ $b=\ \ 0.147057-0.642703I$	$1.15869-1.03212I$	0
$u=-1.158340-0.231833I$ $a=-0.817877+0.574536I$ $b=\ \ 0.147057+0.642703I$	$1.15869+1.03212I$	0
$u=-0.119442+0.754619I$ $a=\ \ 0.44100-1.86219I$ $b=\ \ 0.374544-1.118990I$	$-4.64187-6.24622I$	0
$u=-0.119442-0.754619I$ $a=\ \ 0.44100+1.86219I$ $b=\ \ 0.374544+1.118990I$	$-4.64187+6.24622I$	0
$u=-1.207270+0.288848I$ $a=\ \ 1.100770+0.600111I$ $b=-0.328351+0.984733I$	$-1.41302-4.72361I$	0
$u=-1.207270-0.288848I$ $a=\ \ 1.100770-0.600111I$ $b=-0.328351-0.984733I$	$-1.41302+4.72361I$	0
$u=-1.258690+0.052256I$ $a=-0.241511-1.169820I$ $b=\ \ 0.200788+0.093222I$	$2.44595-1.87550I$	0
$u=-1.258690-0.052256I$ $a=-0.241511+1.169820I$ $b=\ \ 0.200788-0.093222I$	$2.44595+1.87550I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.265130 + 0.134678I$ $a = 0.298029 - 0.315517I$ $b = 1.20646 - 0.83292I$	$2.67098 - 4.72600I$	0
$u = 1.265130 - 0.134678I$ $a = 0.298029 + 0.315517I$ $b = 1.20646 + 0.83292I$	$2.67098 + 4.72600I$	0
$u = -0.060720 + 0.707583I$ $a = 0.18373 - 1.95736I$ $b = -0.097751 - 1.124380I$	$-4.91657 + 1.10042I$	0
$u = -0.060720 - 0.707583I$ $a = 0.18373 + 1.95736I$ $b = -0.097751 + 1.124380I$	$-4.91657 - 1.10042I$	0
$u = -0.128623 + 0.697439I$ $a = -0.27048 + 1.73365I$ $b = -0.165115 + 0.841230I$	$-1.87128 - 2.38560I$	$6.00000 + 4.07768I$
$u = -0.128623 - 0.697439I$ $a = -0.27048 - 1.73365I$ $b = -0.165115 - 0.841230I$	$-1.87128 + 2.38560I$	$6.00000 - 4.07768I$
$u = 1.283140 + 0.186796I$ $a = 0.373253 - 0.484907I$ $b = 0.780681 - 1.002100I$	$0.67630 + 2.73155I$	0
$u = 1.283140 - 0.186796I$ $a = 0.373253 + 0.484907I$ $b = 0.780681 + 1.002100I$	$0.67630 - 2.73155I$	0
$u = 1.294300 + 0.139031I$ $a = -0.232339 + 0.384153I$ $b = -1.028070 + 0.689952I$	$4.93199 + 0.09462I$	0
$u = 1.294300 - 0.139031I$ $a = -0.232339 - 0.384153I$ $b = -1.028070 - 0.689952I$	$4.93199 - 0.09462I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.370573+0.549861I$ $a=-0.036226+0.815695I$ $b=\ \ 0.015187-0.145705I$	$0.29821-3.60185I$	$8.77802+7.91967I$
$u=-0.370573-0.549861I$ $a=-0.036226-0.815695I$ $b=\ \ 0.015187+0.145705I$	$0.29821+3.60185I$	$8.77802-7.91967I$
$u=-1.320460+0.224539I$ $a=-1.13840-1.21130I$ $b=\ \ 1.099530-0.487703I$	$1.26119-2.89599I$	0
$u=-1.320460-0.224539I$ $a=-1.13840+1.21130I$ $b=\ \ 1.099530+0.487703I$	$1.26119+2.89599I$	0
$u=\ \ 1.311480+0.275755I$ $a=-0.585969+0.814922I$ $b=\ \ 0.075543+1.278460I$	$-0.61934+2.43878I$	0
$u=\ \ 1.311480-0.275755I$ $a=-0.585969-0.814922I$ $b=\ \ 0.075543-1.278460I$	$-0.61934-2.43878I$	0
$u=-0.560744+0.338028I$ $a=-0.401947-0.291968I$ $b=-0.417009+0.124386I$	$0.930041+0.097702I$	$11.39299+0.73864I$
$u=-0.560744-0.338028I$ $a=-0.401947+0.291968I$ $b=-0.417009-0.124386I$	$0.930041-0.097702I$	$11.39299-0.73864I$
$u=-1.356550+0.186660I$ $a=\ \ 1.03317+1.48094I$ $b=-1.238570+0.053586I$	$6.71288-2.16341I$	0
$u=-1.356550-0.186660I$ $a=\ \ 1.03317-1.48094I$ $b=-1.238570-0.053586I$	$6.71288+2.16341I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.359340+0.167370I$ $a=-0.93577-1.53603I$ $b=\ \ 1.157740+0.103088I$	$5.16406+2.93183I$	0
$u=-1.359340-0.167370I$ $a=-0.93577+1.53603I$ $b=\ \ 1.157740-0.103088I$	$5.16406-2.93183I$	0
$u=\ \ 1.338010+0.306526I$ $a=-0.634728+1.012130I$ $b=\ \ 0.535704+1.230630I$	$-0.05500+10.07060I$	0
$u=\ \ 1.338010-0.306526I$ $a=-0.634728-1.012130I$ $b=\ \ 0.535704-1.230630I$	$-0.05500-10.07060I$	0
$u=\ \ 1.344200+0.280833I$ $a=\ \ 0.508661-0.958326I$ $b=-0.321400-1.006570I$	$2.77854+5.93136I$	0
$u=\ \ 1.344200-0.280833I$ $a=\ \ 0.508661+0.958326I$ $b=-0.321400+1.006570I$	$2.77854-5.93136I$	0
$u=-1.356800+0.223131I$ $a=\ \ 1.22453+1.39437I$ $b=-1.40250+0.35712I$	$6.21974-4.87713I$	0
$u=-1.356800-0.223131I$ $a=\ \ 1.22453-1.39437I$ $b=-1.40250-0.35712I$	$6.21974+4.87713I$	0
$u=-1.359380+0.235892I$ $a=-1.29717-1.37298I$ $b=\ \ 1.47387-0.46581I$	$4.24684-10.04410I$	0
$u=-1.359380-0.235892I$ $a=-1.29717+1.37298I$ $b=\ \ 1.47387+0.46581I$	$4.24684+10.04410I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.373680 + 0.165838I$ $a = -0.030998 + 0.649563I$ $b = -0.565392 + 0.278503I$	$6.41119 + 1.66341I$	0
$u = 1.373680 - 0.165838I$ $a = -0.030998 - 0.649563I$ $b = -0.565392 - 0.278503I$	$6.41119 - 1.66341I$	0
$u = 0.157895 + 0.574898I$ $a = 0.47890 + 2.17258I$ $b = 1.33051 + 0.56157I$	$-0.57833 + 7.04233I$	$2.90061 - 5.37699I$
$u = 0.157895 - 0.574898I$ $a = 0.47890 - 2.17258I$ $b = 1.33051 - 0.56157I$	$-0.57833 - 7.04233I$	$2.90061 + 5.37699I$
$u = 1.393190 + 0.205065I$ $a = 0.062760 - 0.858438I$ $b = 0.195021 - 0.215669I$	$5.80644 + 6.29039I$	0
$u = 1.393190 - 0.205065I$ $a = 0.062760 + 0.858438I$ $b = 0.195021 + 0.215669I$	$5.80644 - 6.29039I$	0
$u = 0.060811 + 0.581784I$ $a = 0.32226 + 2.03401I$ $b = 0.869516 + 0.680199I$	$-3.09730 - 0.04455I$	$-0.715184 + 0.480345I$
$u = 0.060811 - 0.581784I$ $a = 0.32226 - 2.03401I$ $b = 0.869516 - 0.680199I$	$-3.09730 + 0.04455I$	$-0.715184 - 0.480345I$
$u = 0.147924 + 0.538492I$ $a = -0.50740 - 2.10909I$ $b = -1.224020 - 0.407211I$	$1.42723 + 2.03586I$	$6.04382 - 1.04481I$
$u = 0.147924 - 0.538492I$ $a = -0.50740 + 2.10909I$ $b = -1.224020 + 0.407211I$	$1.42723 - 2.03586I$	$6.04382 + 1.04481I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.40611 + 0.33247I$ $a = 0.52147 - 1.41501I$ $b = -1.29248 - 0.62592I$	$3.48271 + 9.00992I$	0
$u = 1.40611 - 0.33247I$ $a = 0.52147 + 1.41501I$ $b = -1.29248 + 0.62592I$	$3.48271 - 9.00992I$	0
$u = 1.42239 + 0.34002I$ $a = -0.49530 + 1.52622I$ $b = 1.50359 + 0.45510I$	$8.5960 + 11.2525I$	0
$u = 1.42239 - 0.34002I$ $a = -0.49530 - 1.52622I$ $b = 1.50359 - 0.45510I$	$8.5960 - 11.2525I$	0
$u = 1.42069 + 0.34734I$ $a = 0.53981 - 1.54675I$ $b = -1.59516 - 0.52951I$	$6.5335 + 16.4961I$	0
$u = 1.42069 - 0.34734I$ $a = 0.53981 + 1.54675I$ $b = -1.59516 + 0.52951I$	$6.5335 - 16.4961I$	0
$u = 1.42947 + 0.31906I$ $a = -0.36213 + 1.47494I$ $b = 1.253540 + 0.228818I$	$9.38007 + 8.35415I$	0
$u = 1.42947 - 0.31906I$ $a = -0.36213 - 1.47494I$ $b = 1.253540 - 0.228818I$	$9.38007 - 8.35415I$	0
$u = 1.43299 + 0.30718I$ $a = 0.29061 - 1.44097I$ $b = -1.107560 - 0.118760I$	$8.00030 + 3.16463I$	0
$u = 1.43299 - 0.30718I$ $a = 0.29061 + 1.44097I$ $b = -1.107560 + 0.118760I$	$8.00030 - 3.16463I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.527801$ $a=-0.723957$ $b=-0.374114$	0.870536	11.8250
$u=\ \ 1.47354$ $a=\ \ 0.647269$ $b=-1.32717$	8.16717	0
$u=\ \ 1.50558+0.01546I$ $a=-0.830211-0.093239I$ $b=\ \ 1.47970+0.09284I$	$13.64150+1.52842I$	0
$u=\ \ 1.50558-0.01546I$ $a=-0.830211+0.093239I$ $b=\ \ 1.47970-0.09284I$	$13.64150-1.52842I$	0
$u=\ \ 1.50649+0.02862I$ $a=\ \ 0.830893+0.173036I$ $b=-1.46630-0.17312I$	$11.88820+6.80502I$	0
$u=\ \ 1.50649-0.02862I$ $a=\ \ 0.830893-0.173036I$ $b=-1.46630+0.17312I$	$11.88820-6.80502I$	0
$u=\ \ 0.163934+0.407741I$ $a=-0.64977-2.02768I$ $b=-1.030710+0.089763I$	$1.88700-0.17058I$	$6.42139-0.17260I$
$u=\ \ 0.163934-0.407741I$ $a=-0.64977+2.02768I$ $b=-1.030710-0.089763I$	$1.88700+0.17058I$	$6.42139+0.17260I$
$u=\ \ 0.218461+0.348098I$ $a=\ \ 0.67430+2.05517I$ $b=\ \ 1.021640-0.377057I$	$0.22019-4.99067I$	$2.83178+4.98707I$
$u=\ \ 0.218461-0.348098I$ $a=\ \ 0.67430-2.05517I$ $b=\ \ 1.021640+0.377057I$	$0.22019+4.99067I$	$2.83178-4.98707I$

	Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=$	$0.167778+0.119576I$		
$a=$	$0.59959+2.50203I$	$-1.65717+1.14756I$	$-1.67384-1.02015I$
$b=$	$0.335757-0.546609I$		
$u=$	$0.167778-0.119576I$		
$a=$	$0.59959-2.50203I$	$-1.65717-1.14756I$	$-1.67384+1.02015I$
$b=$	$0.335757+0.546609I$		

II. $I_2^u = \langle b^6 + b^5 - b^4 - 2b^3 + b + 1,\ a,\ u + 1\rangle$

(i) Arc colorings

$$a_8 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 0 \\ b \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} 0 \\ -1 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} 0 \\ b \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$
$$a_7 = \begin{pmatrix} 1 \\ b^2 \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -b \\ -b^3 + b \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -b^2 + 1 \\ b^2 \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -b^4 + b^2 - 1 \\ b^5 + b^4 - 2b^3 - b^2 + b + 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

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

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1, c_6	$u^6 - 3u^5 + 5u^4 - 4u^3 + 2u^2 - u + 1$
c_2, c_7	$u^6 + u^5 - u^4 - 2u^3 + u + 1$
c_3, c_5	$u^6 - u^5 - u^4 + 2u^3 - u + 1$
c_4, c_{10}, c_{12}	u^6
c_8, c_9	$(u+1)^6$
c_{11}	$(u-1)^6$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_6	$y^6 + y^5 + 5y^4 + 6y^2 + 3y + 1$
c_2, c_3, c_5 c_7	$y^6 - 3y^5 + 5y^4 - 4y^3 + 2y^2 - y + 1$
c_4, c_{10}, c_{12}	y^6
c_8, c_9, c_{11}	$(y-1)^6$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-1.00000$ $a=0$ $b=1.002190+0.295542I$	$3.53554+0.92430I$	$10.03026-0.88960I$
$u=-1.00000$ $a=0$ $b=1.002190-0.295542I$	$3.53554-0.92430I$	$10.03026+0.88960I$
$u=-1.00000$ $a=0$ $b=-0.428243+0.664531I$	$-0.245672+0.924305I$	$5.20252-1.68215I$
$u=-1.00000$ $a=0$ $b=-0.428243-0.664531I$	$-0.245672-0.924305I$	$5.20252+1.68215I$
$u=-1.00000$ $a=0$ $b=-1.073950+0.558752I$	$1.64493-5.69302I$	$6.76721+6.15196I$
$u=-1.00000$ $a=0$ $b=-1.073950-0.558752I$	$1.64493+5.69302I$	$6.76721-6.15196I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$(u^6-3u^5+5u^4-4u^3+2u^2-u+1)(u^{92}+42u^{91}+\cdots+6u+1)$
c_2	$(u^6+u^5-u^4-2u^3+u+1)(u^{92}+2u^{91}+\cdots-2u+1)$
c_3	$(u^6-u^5-u^4+2u^3-u+1)(u^{92}-2u^{91}+\cdots+110u+25)$
c_4, c_{10}	$u^6(u^{92}-u^{91}+\cdots+128u-64)$
c_5	$(u^6-u^5-u^4+2u^3-u+1)(u^{92}+2u^{91}+\cdots-2u+1)$
c_6	$(u^6-3u^5+5u^4-4u^3+2u^2-u+1)(u^{92}+6u^{91}+\cdots-18u-5)$
c_7	$(u^6+u^5-u^4-2u^3+u+1)(u^{92}-2u^{91}+\cdots+110u+25)$
c_8, c_9	$((u+1)^6)(u^{92}+7u^{91}+\cdots-3u-1)$
c_{11}	$((u-1)^6)(u^{92}+7u^{91}+\cdots-3u-1)$
c_{12}	$u^6(u^{92}-39u^{91}+\cdots-45056u+4096)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$(y^6+y^5+5y^4+6y^2+3y+1)(y^{92}+18y^{91}+\cdots-50y+1)$
c_2, c_5	$(y^6-3y^5+5y^4-4y^3+2y^2-y+1)(y^{92}-42y^{91}+\cdots-6y+1)$
c_3, c_7	$(y^6-3y^5+5y^4-4y^3+2y^2-y+1)(y^{92}-66y^{91}+\cdots+23850y+625)$
c_4, c_{10}	$y^6(y^{92}-39y^{91}+\cdots-45056y+4096)$
c_6	$(y^6+y^5+5y^4+6y^2+3y+1)(y^{92}+6y^{91}+\cdots+1086y+25)$
c_8, c_9, c_{11}	$((y-1)^6)(y^{92}-81y^{91}+\cdots+y+1)$
c_{12}	$y^6(y^{92}+17y^{91}+\cdots-2.01327\times10^8y+1.67772\times10^7)$