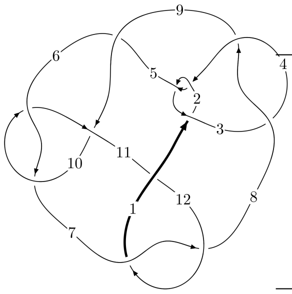
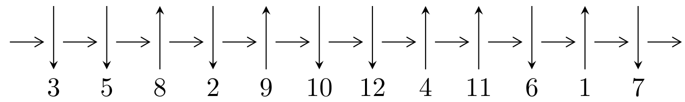
$12a_{0079}$ ($K12a_{0079}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -37u^{43} - 23u^{42} + \cdots + 64b + 15,\ -81u^{43} - 51u^{42} + \cdots + 64a - 37,\ u^{44} + 11u^{42} + \cdots - u + 1\rangle$$
$$I_2^u = \langle 7.20931 \times 10^{43}u^{71} + 8.12549 \times 10^{43}u^{70} + \cdots + 4.80383 \times 10^{43}b + 1.14427 \times 10^{45},$$
$$3.81637 \times 10^{44}u^{71} + 4.59955 \times 10^{44}u^{70} + \cdots + 8.16652 \times 10^{44}a + 1.32091 \times 10^{46},\ u^{72} + 2u^{71} + \cdots + 36u +$$
$$I_3^u = \langle -u^3 + u^2 + 2b + 1,\ -u^3 - u^2 + 2a - 2u + 1,\ u^4 + u^2 - u + 1\rangle$$
$$I_4^u = \langle -a^2 - 2au + 2b - 2u,\ a^3 + 2a^2u + 2a^2 + 2au + 2u - 2,\ u^2 + 1\rangle$$
$$I_5^u = \langle -u^4 - u^3 - u^2 + b - u - 1,\ -u^5 - u^3 - u^2 + a - u - 1,\ u^6 + u^5 + 2u^4 + 2u^3 + 2u^2 + 2u + 1\rangle$$

* 5 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 132 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. $I_1^u = \langle -37u^{43} - 23u^{42} + \cdots + 64b + 15,\ -81u^{43} - 51u^{42} + \cdots + 64a - 37,\ u^{44} + 11u^{42} + \cdots - u + 1\rangle$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} 1.26563u^{43} + 0.796875u^{42} + \cdots - 0.218750u + 0.578125 \\ 0.578125u^{43} + 0.359375u^{42} + \cdots + 1.28125u - 0.234375 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} 2.45313u^{43} + 1.48438u^{42} + \cdots + 1.53125u + 1.14063 \\ 0.765625u^{43} - 0.203125u^{42} + \cdots + 0.781250u - 0.921875 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -\frac{1}{8}u^{42} - \frac{5}{4}u^{40} + \cdots - \frac{7}{8}u - \frac{1}{8} \\ -u^5 - u^3 - u \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} -0.140625u^{43} - 0.0468750u^{42} + \cdots - 2.15625u - 0.578125 \\ -0.140625u^{43} + 0.328125u^{42} + \cdots - 0.0312500u + 0.0468750 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -\frac{1}{8}u^{43} - \frac{5}{4}u^{41} + \cdots - \frac{1}{8}u + 1 \\ u^8 + 2u^6 + 2u^4 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^3 \\ u^3 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -\frac{1}{8}u^{42} - \frac{5}{4}u^{40} + \cdots - \frac{7}{8}u - \frac{1}{8} \\ -u \end{pmatrix}$$
$$a_6 = \begin{pmatrix} -\frac{1}{8}u^{43} - \frac{5}{4}u^{41} + \cdots - \frac{1}{8}u + 1 \\ -u^2 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -\frac{237}{128}u^{43} + \frac{161}{128}u^{42} + \cdots - \frac{897}{64}u + \frac{503}{128}$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{44} + 19u^{43} + \cdots + 97u + 16$
c_2, c_4	$u^{44} - 5u^{43} + \cdots - 5u + 4$
c_3, c_8	$u^{44} + 3u^{43} + \cdots + 368u + 64$
c_5	$u^{44} - 6u^{43} + \cdots + 256u + 256$
c_6, c_7, c_{10} c_{12}	$u^{44} + 11u^{42} + \cdots - u + 1$
c_9, c_{11}	$u^{44} - 22u^{43} + \cdots - 5u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{44} + 17y^{43} + \cdots + 16607y + 256$
c_2, c_4	$y^{44} - 19y^{43} + \cdots - 97y + 16$
c_3, c_8	$y^{44} - 27y^{43} + \cdots - 41216y + 4096$
c_5	$y^{44} - 26y^{43} + \cdots + 950272y + 65536$
c_6, c_7, c_{10} c_{12}	$y^{44} + 22y^{43} + \cdots + 5y + 1$
c_9, c_{11}	$y^{44} + 10y^{43} + \cdots + 13y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\text{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.702421+0.710564I$ $a=-1.287360+0.247682I$ $b=\ \ 1.17050+0.88517I$	$-2.39002-0.58411I$	$-3.85735+0.95240I$
$u=-0.702421-0.710564I$ $a=-1.287360-0.247682I$ $b=\ \ 1.17050-0.88517I$	$-2.39002+0.58411I$	$-3.85735-0.95240I$
$u=\ \ 0.541516+0.820982I$ $a=\ \ 0.98705+1.86895I$ $b=-1.263540-0.356717I$	$-2.85868-3.18935I$	$-4.19435+7.32491I$
$u=\ \ 0.541516-0.820982I$ $a=\ \ 0.98705-1.86895I$ $b=-1.263540+0.356717I$	$-2.85868+3.18935I$	$-4.19435-7.32491I$
$u=-0.557234+0.884832I$ $a=-0.648682+1.028180I$ $b=\ \ 1.88818-0.70589I$	$-2.41767+5.64663I$	$-4.29082-7.41369I$
$u=-0.557234-0.884832I$ $a=-0.648682-1.028180I$ $b=\ \ 1.88818+0.70589I$	$-2.41767-5.64663I$	$-4.29082+7.41369I$
$u=-0.721004+0.533121I$ $a=\ \ 1.084590+0.670648I$ $b=-0.088037-0.937684I$	$-1.95150+2.85445I$	$-3.41509-7.01559I$
$u=-0.721004-0.533121I$ $a=\ \ 1.084590-0.670648I$ $b=-0.088037+0.937684I$	$-1.95150-2.85445I$	$-3.41509+7.01559I$
$u=\ \ 0.244276+0.862218I$ $a=-0.915850-0.492227I$ $b=-0.586924+0.069748I$	$5.65660-4.11751I$	$1.23792+9.55977I$
$u=\ \ 0.244276-0.862218I$ $a=-0.915850+0.492227I$ $b=-0.586924-0.069748I$	$5.65660+4.11751I$	$1.23792-9.55977I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=0.544223+0.973766I$ $a=-0.278642-1.322870I$ $b=0.697971+1.101770I$	$1.52721-6.41039I$	$1.82640+7.81068I$
$u=0.544223-0.973766I$ $a=-0.278642+1.322870I$ $b=0.697971-1.101770I$	$1.52721+6.41039I$	$1.82640-7.81068I$
$u=-0.442356+0.755964I$ $a=0.482101-0.625125I$ $b=-0.874574+0.696057I$	$-0.20950+1.79654I$	$-1.30424-3.42560I$
$u=-0.442356-0.755964I$ $a=0.482101+0.625125I$ $b=-0.874574-0.696057I$	$-0.20950-1.79654I$	$-1.30424+3.42560I$
$u=0.832803+0.215660I$ $a=0.75668+1.33967I$ $b=-1.233260+0.537697I$	$1.44514+7.55819I$	$-3.62079-4.72412I$
$u=0.832803-0.215660I$ $a=0.75668-1.33967I$ $b=-1.233260-0.537697I$	$1.44514-7.55819I$	$-3.62079+4.72412I$
$u=0.649723+0.968222I$ $a=-0.18195+1.78717I$ $b=-1.09227-1.73252I$	$-0.80144-11.01560I$	$-2.00000+10.95786I$
$u=0.649723-0.968222I$ $a=-0.18195-1.78717I$ $b=-1.09227+1.73252I$	$-0.80144+11.01560I$	$-2.00000-10.95786I$
$u=0.176389+0.813834I$ $a=0.934275+0.229215I$ $b=0.760943+0.376418I$	$5.40728+1.98799I$	$-0.95684+3.34899I$
$u=0.176389-0.813834I$ $a=0.934275-0.229215I$ $b=0.760943-0.376418I$	$5.40728-1.98799I$	$-0.95684-3.34899I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.797934 + 0.136440I$ $a = -0.612709 - 0.824826I$ $b = 1.050600 - 0.288526I$	$3.34091 + 1.92831I$	$-0.894274 - 0.474213I$
$u = 0.797934 - 0.136440I$ $a = -0.612709 + 0.824826I$ $b = 1.050600 + 0.288526I$	$3.34091 - 1.92831I$	$-0.894274 + 0.474213I$
$u = -0.417301 + 1.171170I$ $a = -0.422635 + 0.232582I$ $b = -0.687150 + 0.658493I$	$9.45367 + 0.05362I$	$4.61954 - 1.87073I$
$u = -0.417301 - 1.171170I$ $a = -0.422635 - 0.232582I$ $b = -0.687150 - 0.658493I$	$9.45367 - 0.05362I$	$4.61954 + 1.87073I$
$u = 0.578501 + 1.115170I$ $a = 0.465998 - 0.498361I$ $b = -0.439910 + 0.963467I$	$1.63069 - 7.23684I$	$5.33785 + 2.87723I$
$u = 0.578501 - 1.115170I$ $a = 0.465998 + 0.498361I$ $b = -0.439910 - 0.963467I$	$1.63069 + 7.23684I$	$5.33785 - 2.87723I$
$u = 0.487023 + 1.174590I$ $a = -0.758113 - 0.569228I$ $b = 1.45662 + 0.94452I$	$5.00692 - 6.15874I$	$2.59172 + 3.93805I$
$u = 0.487023 - 1.174590I$ $a = -0.758113 + 0.569228I$ $b = 1.45662 - 0.94452I$	$5.00692 + 6.15874I$	$2.59172 - 3.93805I$
$u = -0.447381 + 1.195090I$ $a = 0.562721 - 0.572930I$ $b = 0.165779 - 0.146697I$	$10.86750 + 6.35684I$	$6.13401 - 6.10559I$
$u = -0.447381 - 1.195090I$ $a = 0.562721 + 0.572930I$ $b = 0.165779 + 0.146697I$	$10.86750 - 6.35684I$	$6.13401 + 6.10559I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.512554 + 1.180140I$ $a = -1.39016 + 1.09028I$ $b = 1.81341 + 0.28882I$	$3.05902 + 8.57495I$	$0. - 6.88977I$
$u = -0.512554 - 1.180140I$ $a = -1.39016 - 1.09028I$ $b = 1.81341 - 0.28882I$	$3.05902 - 8.57495I$	$0. + 6.88977I$
$u = 0.523499 + 1.198030I$ $a = 0.956798 + 0.395110I$ $b = -1.94303 - 0.43216I$	$4.40755 - 11.25480I$	$0. + 8.58519I$
$u = 0.523499 - 1.198030I$ $a = 0.956798 - 0.395110I$ $b = -1.94303 + 0.43216I$	$4.40755 + 11.25480I$	$0. - 8.58519I$
$u = -0.665201 + 0.175880I$ $a = 0.29757 + 1.73222I$ $b = 0.213621 - 0.295527I$	$-1.46430 - 1.85279I$	$-5.99718 + 2.24487I$
$u = -0.665201 - 0.175880I$ $a = 0.29757 - 1.73222I$ $b = 0.213621 + 0.295527I$	$-1.46430 + 1.85279I$	$-5.99718 - 2.24487I$
$u = -0.527362 + 1.224400I$ $a = 0.83924 - 1.57599I$ $b = -1.67956 + 1.31887I$	$9.7294 + 11.8297I$	0
$u = -0.527362 - 1.224400I$ $a = 0.83924 + 1.57599I$ $b = -1.67956 - 1.31887I$	$9.7294 - 11.8297I$	0
$u = -0.550329 + 1.227230I$ $a = -0.86593 + 1.85592I$ $b = 2.23259 - 1.75027I$	$7.5382 + 17.9201I$	0
$u = -0.550329 - 1.227230I$ $a = -0.86593 - 1.85592I$ $b = 2.23259 + 1.75027I$	$7.5382 - 17.9201I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u=-0.327143+0.524057I$ $a=\quad 0.410580-0.825478I$ $b=-0.146771+0.642611I$	$-0.272632+1.272590I$	$-2.20676-6.23144I$
$u=-0.327143-0.524057I$ $a=\quad 0.410580+0.825478I$ $b=-0.146771-0.642611I$	$-0.272632-1.272590I$	$-2.20676+6.23144I$
$u=\quad 0.494397+0.271698I$ $a=-1.16558+1.11171I$ $b=-1.165190-0.400869I$	$-2.42152-0.21458I$	$-4.60274-1.73756I$
$u=\quad 0.494397-0.271698I$ $a=-1.16558-1.11171I$ $b=-1.165190+0.400869I$	$-2.42152+0.21458I$	$-4.60274+1.73756I$

II. $\boldsymbol{I_2^u =}$
$\boldsymbol{\langle 7.21\times 10^{43}u^{71}+8.13\times 10^{43}u^{70}+\cdots+4.80\times 10^{43}b+1.14\times 10^{45},\ 3.82\times 10^{44}u^{71}+ 4.60\times 10^{44}u^{70}+\cdots+8.17\times 10^{44}a+1.32\times 10^{46},\ u^{72}+2u^{71}+\cdots+36u+17\rangle}$

(i) Arc colorings

$$a_7 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$
$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$
$$a_3 = \begin{pmatrix} -0.467319u^{71} - 0.563220u^{70} + \cdots - 14.2494u - 16.1748 \\ -1.50074u^{71} - 1.69146u^{70} + \cdots - 17.9037u - 23.8200 \end{pmatrix}$$
$$a_8 = \begin{pmatrix} 1 \\ u^2 \end{pmatrix}$$
$$a_4 = \begin{pmatrix} -1.25930u^{71} - 1.57923u^{70} + \cdots - 26.7265u - 33.6806 \\ -1.70682u^{71} - 1.97705u^{70} + \cdots - 24.8865u - 33.4752 \end{pmatrix}$$
$$a_9 = \begin{pmatrix} -1.00551u^{71} - 1.34156u^{70} + \cdots - 23.0730u - 26.3589 \\ 0.279157u^{71} + 0.474972u^{70} + \cdots + 8.92590u + 6.88474 \end{pmatrix}$$
$$a_1 = \begin{pmatrix} -u \\ u \end{pmatrix}$$
$$a_2 = \begin{pmatrix} 0.895599u^{71} + 1.36883u^{70} + \cdots + 19.3192u + 14.3574 \\ 1.42522u^{71} + 1.78940u^{70} + \cdots + 23.2939u + 40.2087 \end{pmatrix}$$
$$a_5 = \begin{pmatrix} -0.117896u^{71} - 0.0392528u^{70} + \cdots - 2.09819u - 6.93997 \\ 1.19235u^{71} + 1.44737u^{70} + \cdots + 18.2425u + 29.6873 \end{pmatrix}$$
$$a_{11} = \begin{pmatrix} -u^3 \\ u^3 + u \end{pmatrix}$$
$$a_{10} = \begin{pmatrix} -1.56516u^{71} - 2.10935u^{70} + \cdots - 32.8257u - 36.3231 \\ 1.50634u^{71} + 1.99171u^{70} + \cdots + 28.8257u + 34.2054 \end{pmatrix}$$
$$a_6 = \begin{pmatrix} 0.991116u^{71} + 1.14343u^{70} + \cdots + 12.9794u + 18.0016 \\ 1.02097u^{71} + 1.37440u^{70} + \cdots + 20.0227u + 26.6077 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= -2.80981u^{71} - 4.48043u^{70} + \cdots - 78.5168u - 56.1900$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$(u^{36} + 16u^{35} + \cdots + 24u + 1)^2$
c_2, c_4	$(u^{36} - 4u^{35} + \cdots + 8u - 1)^2$
c_3, c_8	$(u^{36} - u^{35} + \cdots - 12u + 8)^2$
c_5	$(u^{36} + 2u^{35} + \cdots - 19u - 17)^2$
c_6, c_7, c_{10} c_{12}	$u^{72} + 2u^{71} + \cdots + 36u + 17$
c_9, c_{11}	$u^{72} - 42u^{71} + \cdots - 1016u + 289$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$(y^{36}+12y^{35}+\cdots-516y+1)^2$
c_2, c_4	$(y^{36}-16y^{35}+\cdots-24y+1)^2$
c_3, c_8	$(y^{36}-21y^{35}+\cdots-784y+64)^2$
c_5	$(y^{36}-26y^{35}+\cdots+2461y+289)^2$
c_6, c_7, c_{10} c_{12}	$y^{72}+42y^{71}+\cdots+1016y+289$
c_9, c_{11}	$y^{72}-26y^{71}+\cdots-1428764y+83521$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.409149 + 0.888281I$ $a = 1.70792 - 1.42545I$ $b = -1.04226 + 2.02155I$	$4.75623 + 0.53351I$	$3.64819 + 0.I$
$u = 0.409149 - 0.888281I$ $a = 1.70792 + 1.42545I$ $b = -1.04226 - 2.02155I$	$4.75623 - 0.53351I$	$3.64819 + 0.I$
$u = -0.455168 + 0.847626I$ $a = 0.212523 - 1.097530I$ $b = -0.370366 + 0.906924I$	$0.05729 + 1.97104I$	$-0.62656 - 3.58123I$
$u = -0.455168 - 0.847626I$ $a = 0.212523 + 1.097530I$ $b = -0.370366 - 0.906924I$	$0.05729 - 1.97104I$	$-0.62656 + 3.58123I$
$u = 0.755491 + 0.560366I$ $a = 1.238410 + 0.681717I$ $b = -1.25454 + 0.72755I$	$-1.98700 + 5.74916I$	$-4.01965 - 6.40491I$
$u = 0.755491 - 0.560366I$ $a = 1.238410 - 0.681717I$ $b = -1.25454 - 0.72755I$	$-1.98700 - 5.74916I$	$-4.01965 + 6.40491I$
$u = -0.659290 + 0.847574I$ $a = 0.60077 + 1.61013I$ $b = 0.63373 - 1.62428I$	$-1.98700 + 5.74916I$	0
$u = -0.659290 - 0.847574I$ $a = 0.60077 - 1.61013I$ $b = 0.63373 + 1.62428I$	$-1.98700 - 5.74916I$	0
$u = -0.910210 + 0.166809I$ $a = -0.590692 + 1.275390I$ $b = 1.198450 + 0.543963I$	$4.33227 - 12.63140I$	$-0.57875 + 8.03158I$
$u = -0.910210 - 0.166809I$ $a = -0.590692 - 1.275390I$ $b = 1.198450 - 0.543963I$	$4.33227 + 12.63140I$	$-0.57875 - 8.03158I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.228178 + 1.075270I$ $a = -0.104567 - 0.878124I$ $b = 0.096051 + 0.918252I$	4.07897	0
$u = 0.228178 - 1.075270I$ $a = -0.104567 + 0.878124I$ $b = 0.096051 - 0.918252I$	4.07897	0
$u = -0.881164 + 0.129616I$ $a = 0.512396 - 0.784455I$ $b = -1.113380 - 0.271093I$	$6.43964 - 6.72875I$	$2.21840 + 3.94329I$
$u = -0.881164 - 0.129616I$ $a = 0.512396 + 0.784455I$ $b = -1.113380 + 0.271093I$	$6.43964 + 6.72875I$	$2.21840 - 3.94329I$
$u = 0.534292 + 0.706507I$ $a = 0.243547 + 1.316740I$ $b = -1.67125 - 0.77862I$	$-3.18873 - 1.16610I$	$-6.74685 + 0.24767I$
$u = 0.534292 - 0.706507I$ $a = 0.243547 - 1.316740I$ $b = -1.67125 + 0.77862I$	$-3.18873 + 1.16610I$	$-6.74685 - 0.24767I$
$u = -0.045170 + 1.119970I$ $a = 1.55994 - 1.48818I$ $b = -1.83564 + 2.24406I$	$1.63239 - 0.63628I$	0
$u = -0.045170 - 1.119970I$ $a = 1.55994 + 1.48818I$ $b = -1.83564 - 2.24406I$	$1.63239 + 0.63628I$	0
$u = 0.791769 + 0.369472I$ $a = -0.900892 + 0.256022I$ $b = 0.168348 - 0.537368I$	$-0.58092 + 2.11524I$	$0.291403 + 1.121671I$
$u = 0.791769 - 0.369472I$ $a = -0.900892 - 0.256022I$ $b = 0.168348 + 0.537368I$	$-0.58092 - 2.11524I$	$0.291403 - 1.121671I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.112400 + 0.841063I$ $a = -1.51856 + 3.83928I$ $b = 2.04934 - 2.91850I$	$1.63239 + 0.63628I$	$-7.12504 - 1.61784I$
$u = -0.112400 - 0.841063I$ $a = -1.51856 - 3.83928I$ $b = 2.04934 + 2.91850I$	$1.63239 - 0.63628I$	$-7.12504 + 1.61784I$
$u = -0.581173 + 0.999377I$ $a = -0.773782 - 0.567783I$ $b = 0.611840 + 1.138310I$	$-0.58092 + 2.11524I$	0
$u = -0.581173 - 0.999377I$ $a = -0.773782 + 0.567783I$ $b = 0.611840 - 1.138310I$	$-0.58092 - 2.11524I$	0
$u = 0.828510 + 0.154792I$ $a = -0.19112 + 1.52316I$ $b = -0.180527 - 0.134893I$	$1.31256 + 6.30262I$	$-1.69943 - 5.66674I$
$u = 0.828510 - 0.154792I$ $a = -0.19112 - 1.52316I$ $b = -0.180527 + 0.134893I$	$1.31256 - 6.30262I$	$-1.69943 + 5.66674I$
$u = -0.561309 + 0.609175I$ $a = -0.51140 + 2.05101I$ $b = 0.806153 - 0.446308I$	$-3.18873 - 1.16610I$	$-6.74685 + 0.24767I$
$u = -0.561309 - 0.609175I$ $a = -0.51140 - 2.05101I$ $b = 0.806153 + 0.446308I$	$-3.18873 + 1.16610I$	$-6.74685 - 0.24767I$
$u = 0.407068 + 0.708583I$ $a = -2.07466 + 2.08069I$ $b = 0.60334 - 2.22141I$	$4.19715 - 4.09703I$	$1.30644 + 6.77310I$
$u = 0.407068 - 0.708583I$ $a = -2.07466 - 2.08069I$ $b = 0.60334 + 2.22141I$	$4.19715 + 4.09703I$	$1.30644 - 6.77310I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.410573 + 1.128750I$ $a = 0.771523 - 0.647562I$ $b = -1.37966 + 1.04264I$	$1.93253 + 1.63914I$	0
$u = -0.410573 - 1.128750I$ $a = 0.771523 + 0.647562I$ $b = -1.37966 - 1.04264I$	$1.93253 - 1.63914I$	0
$u = -0.777062 + 0.158927I$ $a = 0.704276 + 0.326097I$ $b = 1.45389 - 0.15969I$	$0.06849 - 3.79621I$	$-0.47580 + 4.06401I$
$u = -0.777062 - 0.158927I$ $a = 0.704276 - 0.326097I$ $b = 1.45389 + 0.15969I$	$0.06849 + 3.79621I$	$-0.47580 - 4.06401I$
$u = 0.465720 + 1.120490I$ $a = 1.51946 + 1.22973I$ $b = -1.89566 + 0.13420I$	$0.06849 - 3.79621I$	0
$u = 0.465720 - 1.120490I$ $a = 1.51946 - 1.22973I$ $b = -1.89566 - 0.13420I$	$0.06849 + 3.79621I$	0
$u = -0.763968 + 0.014323I$ $a = 0.524811 - 1.023410I$ $b = -1.076360 - 0.366532I$	$7.37183 + 2.02960I$	$3.16240 - 2.61607I$
$u = -0.763968 - 0.014323I$ $a = 0.524811 + 1.023410I$ $b = -1.076360 + 0.366532I$	$7.37183 - 2.02960I$	$3.16240 + 2.61607I$
$u = -0.370509 + 1.188210I$ $a = -1.75509 + 0.96312I$ $b = 2.15450 + 0.31778I$	4.05359	0
$u = -0.370509 - 1.188210I$ $a = -1.75509 - 0.96312I$ $b = 2.15450 - 0.31778I$	4.05359	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.411287 + 1.177490I$ $a = 1.217730 + 0.365979I$ $b = -2.06128 - 0.33109I$	$5.54767 - 2.29689I$	0
$u = 0.411287 - 1.177490I$ $a = 1.217730 - 0.365979I$ $b = -2.06128 + 0.33109I$	$5.54767 + 2.29689I$	0
$u = -0.492711 + 1.148580I$ $a = -1.035490 + 0.488094I$ $b = 2.00387 - 0.44833I$	$1.31256 + 6.30262I$	0
$u = -0.492711 - 1.148580I$ $a = -1.035490 - 0.488094I$ $b = 2.00387 + 0.44833I$	$1.31256 - 6.30262I$	0
$u = 0.037461 + 1.251950I$ $a = 0.441175 - 0.103555I$ $b = 0.424615 + 0.528208I$	$4.19715 + 4.09703I$	0
$u = 0.037461 - 1.251950I$ $a = 0.441175 + 0.103555I$ $b = 0.424615 - 0.528208I$	$4.19715 - 4.09703I$	0
$u = 0.309956 + 1.214780I$ $a = 0.432531 + 0.143154I$ $b = 0.611055 + 0.634446I$	$5.93992 + 3.86936I$	0
$u = 0.309956 - 1.214780I$ $a = 0.432531 - 0.143154I$ $b = 0.611055 - 0.634446I$	$5.93992 - 3.86936I$	0
$u = 0.133945 + 1.249350I$ $a = -0.423831 - 0.310303I$ $b = -0.258882 + 0.442938I$	$4.75623 - 0.53351I$	0
$u = 0.133945 - 1.249350I$ $a = -0.423831 + 0.310303I$ $b = -0.258882 - 0.442938I$	$4.75623 + 0.53351I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.375140 + 1.206170I$ $a = -0.563016 - 0.541789I$ $b = -0.1299830 - 0.0395878I$	$7.37183 - 2.02960I$	0
$u = 0.375140 - 1.206170I$ $a = -0.563016 + 0.541789I$ $b = -0.1299830 + 0.0395878I$	$7.37183 + 2.02960I$	0
$u = -0.482731 + 1.167840I$ $a = -0.86793 + 2.26662I$ $b = 2.23105 - 2.18148I$	$8.98461 + 8.30646I$	0
$u = -0.482731 - 1.167840I$ $a = -0.86793 - 2.26662I$ $b = 2.23105 + 2.18148I$	$8.98461 - 8.30646I$	0
$u = 0.727286 + 0.101479I$ $a = -0.46105 - 1.37059I$ $b = 0.036653 + 0.262952I$	$1.93253 + 1.63914I$	$-0.522063 - 0.383588I$
$u = 0.727286 - 0.101479I$ $a = -0.46105 + 1.37059I$ $b = 0.036653 - 0.262952I$	$1.93253 - 1.63914I$	$-0.522063 + 0.383588I$
$u = 0.362076 + 1.228520I$ $a = -0.884432 - 0.604137I$ $b = 1.53193 + 1.11081I$	$5.54767 + 2.29689I$	0
$u = 0.362076 - 1.228520I$ $a = -0.884432 + 0.604137I$ $b = 1.53193 - 1.11081I$	$5.54767 - 2.29689I$	0
$u = -0.456591 + 1.196920I$ $a = 0.84132 - 1.84000I$ $b = -1.69455 + 1.68616I$	$10.80280 + 2.38075I$	0
$u = -0.456591 - 1.196920I$ $a = 0.84132 + 1.84000I$ $b = -1.69455 - 1.68616I$	$10.80280 - 2.38075I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.566008 + 0.431209I$ $a = -0.514563 - 0.449521I$ $b = 0.735432 + 0.198154I$	$0.05729 + 1.97104I$	$-0.62656 - 3.58123I$
$u = 0.566008 - 0.431209I$ $a = -0.514563 + 0.449521I$ $b = 0.735432 - 0.198154I$	$0.05729 - 1.97104I$	$-0.62656 + 3.58123I$
$u = -0.702958 + 0.092048I$ $a = -0.64196 + 1.78168I$ $b = 1.234370 + 0.442175I$	$5.93992 - 3.86936I$	$1.24553 + 2.32285I$
$u = -0.702958 - 0.092048I$ $a = -0.64196 - 1.78168I$ $b = 1.234370 - 0.442175I$	$5.93992 + 3.86936I$	$1.24553 - 2.32285I$
$u = 0.508850 + 1.189940I$ $a = -0.75750 - 1.66176I$ $b = 1.56542 + 1.44723I$	$6.43964 - 6.72875I$	0
$u = 0.508850 - 1.189940I$ $a = -0.75750 + 1.66176I$ $b = 1.56542 - 1.44723I$	$6.43964 + 6.72875I$	0
$u = 0.544890 + 1.184880I$ $a = 0.74938 + 1.98359I$ $b = -2.10683 - 1.88484I$	$4.33227 - 12.63140I$	0
$u = 0.544890 - 1.184880I$ $a = 0.74938 - 1.98359I$ $b = -2.10683 + 1.88484I$	$4.33227 + 12.63140I$	0
$u = -0.380779 + 1.271410I$ $a = 0.541111 - 0.546274I$ $b = 0.0212990 - 0.0734012I$	$10.80280 - 2.38075I$	0
$u = -0.380779 - 1.271410I$ $a = 0.541111 + 0.546274I$ $b = 0.0212990 + 0.0734012I$	$10.80280 + 2.38075I$	0

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -0.353308 + 1.294920I$ $a = -0.365915 + 0.150791I$ $b = -0.600175 + 0.697735I$	$8.98461 - 8.30646I$	0
$u = -0.353308 - 1.294920I$ $a = -0.365915 - 0.150791I$ $b = -0.600175 - 0.697735I$	$8.98461 + 8.30646I$	0

III. $\boldsymbol{I_3^u = \langle -u^3+u^2+2b+1,\ -u^3-u^2+2a-2u+1,\ u^4+u^2-u+1\rangle}$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= \frac{11}{4}u^3+\frac{21}{4}u^2-\frac{1}{2}u-\frac{17}{4}$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^4$
c_3, c_8	y^4
c_5	$y^4 - y^3 + 2y^2 + 7y + 4$
c_6, c_7, c_{10} c_{12}	$y^4 + 2y^3 + 3y^2 + y + 1$
c_9, c_{11}	$y^4 + 2y^3 + 7y^2 + 5y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_3^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.547424 + 0.585652I$ $a = -0.173850 + 1.069070I$ $b = -0.677958 - 0.157780I$	$-2.62503 - 1.39709I$	$-5.84901 + 3.96898I$
$u = 0.547424 - 0.585652I$ $a = -0.173850 - 1.069070I$ $b = -0.677958 + 0.157780I$	$-2.62503 + 1.39709I$	$-5.84901 - 3.96898I$
$u = -0.547424 + 1.120870I$ $a = -0.576150 + 0.307015I$ $b = 0.927958 + 0.413327I$	$0.98010 + 7.64338I$	$-3.77599 - 8.10462I$
$u = -0.547424 - 1.120870I$ $a = -0.576150 - 0.307015I$ $b = 0.927958 - 0.413327I$	$0.98010 - 7.64338I$	$-3.77599 + 8.10462I$

IV. $\boldsymbol{I_4^u = \langle -a^2 - 2au + 2b - 2u,\ a^3 + 2a^2u + 2a^2 + 2au + 2u - 2,\ u^2 + 1\rangle}$

(i) Arc colorings

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

$$a_{12} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_3 = \begin{pmatrix} a \\ \frac{1}{2}a^2 + au + u \end{pmatrix}$$

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

$$a_4 = \begin{pmatrix} \frac{1}{2}a^2 + au + 2a + u \\ -a \end{pmatrix}$$

$$a_9 = \begin{pmatrix} -\frac{1}{2}a^2u - \frac{1}{2}au + \frac{1}{2}a + u - 1 \\ -u \end{pmatrix}$$

$$a_1 = \begin{pmatrix} -u \\ u \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -2u - 1 \\ \frac{1}{2}a^2 + \frac{1}{2}au + \frac{1}{2}a + u + 1 \end{pmatrix}$$

$$a_5 = \begin{pmatrix} \frac{1}{2}a^2 + \frac{1}{2}au + \frac{1}{2}a - u - 1 \\ 1 \end{pmatrix}$$

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

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

$$a_6 = \begin{pmatrix} \frac{1}{2}a^2 + \frac{1}{2}au + \frac{1}{2}a - u - 1 \\ 1 \end{pmatrix}$$

(ii) Obstruction class $= 1$

(iii) Cusp Shapes $= -2au + 2a + 8$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_4^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.000000I$ $a = -0.867423 + 0.622301I$ $b = -0.439718 - 0.407221I$	$6.31400 + 2.82812I$	$7.50976 - 2.97945I$
$u = 1.000000I$ $a = 0.622301 - 0.867423I$ $b = 0.684841 + 1.082500I$	$6.31400 - 2.82812I$	$7.50976 + 2.97945I$
$u = 1.000000I$ $a = -1.75488 - 1.75488I$ $b = 1.75488 + 2.32472I$	2.17641	$-60.980489 + 0.10I$
$u = -1.000000I$ $a = -0.867423 - 0.622301I$ $b = -0.439718 + 0.407221I$	$6.31400 - 2.82812I$	$7.50976 + 2.97945I$
$u = -1.000000I$ $a = 0.622301 + 0.867423I$ $b = 0.684841 - 1.082500I$	$6.31400 + 2.82812I$	$7.50976 - 2.97945I$
$u = -1.000000I$ $a = -1.75488 + 1.75488I$ $b = 1.75488 - 2.32472I$	2.17641	$-60.980489 + 0.10I$

V. $\boldsymbol{I^u_5 = \langle -u^4 - u^3 - u^2 + b - u - 1,\ -u^5 - u^3 - u^2 + a - u - 1,\ u^6 + u^5 + 2u^4 + 2u^3 + 2u^2 + 2u + 1\rangle}$

(i) Arc colorings

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

(ii) Obstruction class $= 1$

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

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1, c_2, c_4	$(y-1)^6$
c_3, c_8	y^6
c_5	$(y^3 - y^2 + 2y - 1)^2$
c_6, c_7, c_{10} c_{12}	$y^6 + 3y^5 + 4y^4 + 2y^3 + 1$
c_9, c_{11}	$y^6 - y^5 + 4y^4 - 2y^3 + 8y^2 + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_5^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.498832 + 1.001300I$ $a = 0.662359 + 0.562280I$ $b = -1.060970 + 0.237841I$	$-1.37919 - 2.82812I$	$-5.84740 + 3.54173I$
$u = 0.498832 - 1.001300I$ $a = 0.662359 - 0.562280I$ $b = -1.060970 - 0.237841I$	$-1.37919 + 2.82812I$	$-5.84740 - 3.54173I$
$u = -0.284920 + 1.115140I$ $a = -1.32472$ $b = 1.53980 + 0.84179I$	2.75839	$-6 - 1.305207 + 0.10I$
$u = -0.284920 - 1.115140I$ $a = -1.32472$ $b = 1.53980 - 0.84179I$	2.75839	$-6 - 1.305207 + 0.10I$
$u = -0.713912 + 0.305839I$ $a = 0.662359 + 0.562280I$ $b = 0.521167 - 0.055259I$	$-1.37919 - 2.82812I$	$-5.84740 + 3.54173I$
$u = -0.713912 - 0.305839I$ $a = 0.662359 - 0.562280I$ $b = 0.521167 + 0.055259I$	$-1.37919 + 2.82812I$	$-5.84740 - 3.54173I$

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^{10})(u^3-u^2+2u-1)^2(u^{36}+16u^{35}+\cdots+24u+1)^2$ $\cdot(u^{44}+19u^{43}+\cdots+97u+16)$
c_2	$((u-1)^{10})(u^3+u^2-1)^2(u^{36}-4u^{35}+\cdots+8u-1)^2$ $\cdot(u^{44}-5u^{43}+\cdots-5u+4)$
c_3, c_8	$u^{10}(u^6-3u^4+2u^2+1)(u^{36}-u^{35}+\cdots-12u+8)^2$ $\cdot(u^{44}+3u^{43}+\cdots+368u+64)$
c_4	$((u+1)^{10})(u^3-u^2+1)^2(u^{36}-4u^{35}+\cdots+8u-1)^2$ $\cdot(u^{44}-5u^{43}+\cdots-5u+4)$
c_5	$u^6(u^3+u^2-1)^2(u^4-3u^3+4u^2-3u+2)$ $\cdot((u^{36}+2u^{35}+\cdots-19u-17)^2)(u^{44}-6u^{43}+\cdots+256u+256)$
c_6, c_7	$(u^2+1)^3(u^4+u^2-u+1)(u^6+u^5+2u^4+2u^3+2u^2+2u+1)$ $\cdot(u^{44}+11u^{42}+\cdots-u+1)(u^{72}+2u^{71}+\cdots+36u+17)$
c_9, c_{11}	$(u+1)^6(u^4+2u^3+3u^2+u+1)(u^6+3u^5+4u^4+2u^3+1)$ $\cdot(u^{44}-22u^{43}+\cdots-5u+1)(u^{72}-42u^{71}+\cdots-1016u+289)$
c_{10}, c_{12}	$(u^2+1)^3(u^4+u^2+u+1)(u^6-u^5+2u^4-2u^3+2u^2-2u+1)$ $\cdot(u^{44}+11u^{42}+\cdots-u+1)(u^{72}+2u^{71}+\cdots+36u+17)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^{10})(y^3+3y^2+2y-1)^2(y^{36}+12y^{35}+\cdots-516y+1)^2$ $\cdot(y^{44}+17y^{43}+\cdots+16607y+256)$
c_2, c_4	$((y-1)^{10})(y^3-y^2+2y-1)^2(y^{36}-16y^{35}+\cdots-24y+1)^2$ $\cdot(y^{44}-19y^{43}+\cdots-97y+16)$
c_3, c_8	$y^{10}(y^3-3y^2+2y+1)^2(y^{36}-21y^{35}+\cdots-784y+64)^2$ $\cdot(y^{44}-27y^{43}+\cdots-41216y+4096)$
c_5	$y^6(y^3-y^2+2y-1)^2(y^4-y^3+2y^2+7y+4)$ $\cdot(y^{36}-26y^{35}+\cdots+2461y+289)^2$ $\cdot(y^{44}-26y^{43}+\cdots+950272y+65536)$
c_6, c_7, c_{10} c_{12}	$(y+1)^6(y^4+2y^3+3y^2+y+1)(y^6+3y^5+4y^4+2y^3+1)$ $\cdot(y^{44}+22y^{43}+\cdots+5y+1)(y^{72}+42y^{71}+\cdots+1016y+289)$
c_9, c_{11}	$(y-1)^6(y^4+2y^3+7y^2+5y+1)(y^6-y^5+4y^4-2y^3+8y^2+1)$ $\cdot(y^{44}+10y^{43}+\cdots+13y+1)(y^{72}-26y^{71}+\cdots-1428764y+83521)$