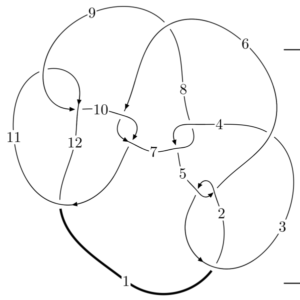
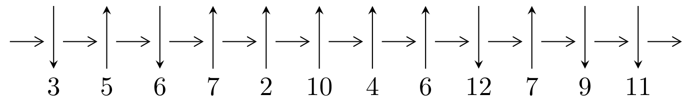
$12n_{0003}$ ($K12n_{0003}$)



A knot diagram[1]

Linearized knot diagam



Solving Sequence

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

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

$$I_1^u = \langle -1.97857 \times 10^{48} u^{47} - 8.37875 \times 10^{48} u^{46} + \cdots + 1.28272 \times 10^{49} b + 5.04932 \times 10^{48},$$
$$- 1.38689 \times 10^{49} u^{47} - 4.12412 \times 10^{49} u^{46} + \cdots + 1.28272 \times 10^{49} a - 7.42829 \times 10^{49},\ u^{48} + 3u^{47} + \cdots + 2u -$$
$$I_2^u = \langle u^2 a + b,\ u^5 a + u^5 - 2u^3 a - 2u^4 + u^2 a - u^3 + a^2 + 2au + 3u^2 - a - 2,\ u^6 - u^5 - u^4 + 2u^3 - u + 1 \rangle$$

* 2 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 60 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.

$\boldsymbol{I_1^u = \langle -1.98\times10^{48}u^{47} - 8.38\times10^{48}u^{46} + \cdots + 1.28\times10^{49}b + 5.05\times10^{48},\ -1.39\times10^{49}u^{47} - 4.12\times10^{49}u^{46} + \cdots + 1.28\times10^{49}a - 7.43\times10^{49},\ u^{48} + 3u^{47} + \cdots + 2u + 1\rangle}$

(i) Arc colorings

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

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

$$a_4 = \begin{pmatrix} 1.08121u^{47} + 3.21513u^{46} + \cdots + 0.931628u + 5.79103 \\ 0.154247u^{47} + 0.653200u^{46} + \cdots - 0.117415u - 0.393641 \end{pmatrix}$$

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

$$a_5 = \begin{pmatrix} 0.794887u^{47} + 2.62840u^{46} + \cdots - 0.210005u + 5.42589 \\ 0.264517u^{47} + 0.943944u^{46} + \cdots + 0.140724u - 0.121410 \end{pmatrix}$$

$$a_8 = \begin{pmatrix} 0.138808u^{47} + 0.0569367u^{46} + \cdots + 1.13835u - 1.23220 \\ 0.0866426u^{47} + 0.143205u^{46} + \cdots - 0.0590538u + 0.156142 \end{pmatrix}$$

$$a_9 = \begin{pmatrix} 0.225450u^{47} + 0.200142u^{46} + \cdots + 1.07929u - 1.07605 \\ 0.0866426u^{47} + 0.143205u^{46} + \cdots - 0.0590538u + 0.156142 \end{pmatrix}$$

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

$$a_{12} = \begin{pmatrix} 0.197793u^{47} + 0.746837u^{46} + \cdots - 0.411380u + 1.70840 \\ 0.497798u^{47} + 1.23878u^{46} + \cdots + 1.17262u + 0.785808 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} 1.23546u^{47} + 3.86833u^{46} + \cdots + 0.814213u + 5.39739 \\ 0.154247u^{47} + 0.653200u^{46} + \cdots - 0.117415u - 0.393641 \end{pmatrix}$$

$$a_2 = \begin{pmatrix} -1.23812u^{47} - 2.80513u^{46} + \cdots - 9.14389u + 0.0144920 \\ 0.146826u^{47} + 0.655230u^{46} + \cdots + 0.00400667u + 0.694477 \end{pmatrix}$$

$$a_1 = \begin{pmatrix} 0.138808u^{47} + 0.0569367u^{46} + \cdots + 1.13835u - 1.23220 \\ -0.270573u^{47} - 0.659768u^{46} + \cdots - 0.521111u - 0.515628 \end{pmatrix}$$

(ii) Obstruction class $= -1$

(iii) Cusp Shapes $= 7.13383u^{47} + 19.7832u^{46} + \cdots + 16.2053u + 20.7902$

(iv) u-Polynomials at the component

Crossings	u-Polynomials at each crossing
c_1	$u^{48} + 31u^{47} + \cdots + 24u + 1$
c_2, c_5	$u^{48} + 7u^{47} + \cdots + 12u + 1$
c_3	$u^{48} - 7u^{47} + \cdots + 12u^2 + 1$
c_4, c_7	$u^{48} + 3u^{47} + \cdots - 8192u + 4096$
c_6, c_{10}	$u^{48} - 3u^{47} + \cdots - 2u + 1$
c_8	$u^{48} + 9u^{47} + \cdots - 23626848u + 3579401$
c_9, c_{11}	$u^{48} - 3u^{47} + \cdots - 8u + 1$
c_{12}	$u^{48} + 29u^{47} + \cdots + 8u + 1$

(v) Riley Polynomials at the component

Crossings	Riley Polynomials at each crossing
c_1	$y^{48} - 21y^{47} + \cdots + 2824y + 1$
c_2, c_5	$y^{48} + 31y^{47} + \cdots + 24y + 1$
c_3	$y^{48} - 73y^{47} + \cdots + 24y + 1$
c_4, c_7	$y^{48} + 65y^{47} + \cdots + 184549376y + 16777216$
c_6, c_{10}	$y^{48} - 9y^{47} + \cdots - 8y + 1$
c_8	$y^{48} + 83y^{47} + \cdots + 697935129971156y + 12812111518801$
c_9, c_{11}	$y^{48} - 29y^{47} + \cdots - 8y + 1$
c_{12}	$y^{48} - 17y^{47} + \cdots + 200y + 1$

(vi) Complex Volumes and Cusp Shapes

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 0.888432 + 0.471966I$ $a = -0.334610 - 1.300970I$ $b = -0.050019 + 0.219961I$	$-4.63723 - 0.72636I$	$-3.19086 - 0.34526I$
$u = 0.888432 - 0.471966I$ $a = -0.334610 + 1.300970I$ $b = -0.050019 - 0.219961I$	$-4.63723 + 0.72636I$	$-3.19086 + 0.34526I$
$u = 0.636986 + 0.733622I$ $a = 0.279122 + 0.849564I$ $b = -0.813791 - 0.933020I$	$-5.67745 + 5.32167I$	$-4.21900 - 6.97135I$
$u = 0.636986 - 0.733622I$ $a = 0.279122 - 0.849564I$ $b = -0.813791 + 0.933020I$	$-5.67745 - 5.32167I$	$-4.21900 + 6.97135I$
$u = -1.035480 + 0.144515I$ $a = 0.398707 + 0.045146I$ $b = -0.005777 - 0.451241I$	$1.83509 - 0.11544I$	$4.43775 + 1.73282I$
$u = -1.035480 - 0.144515I$ $a = 0.398707 - 0.045146I$ $b = -0.005777 + 0.451241I$	$1.83509 + 0.11544I$	$4.43775 - 1.73282I$
$u = 0.468363 + 0.992714I$ $a = -0.028122 + 0.951893I$ $b = 0.197854 - 0.122368I$	$-3.89164 - 1.83510I$	$-3.88038 + 1.67120I$
$u = 0.468363 - 0.992714I$ $a = -0.028122 - 0.951893I$ $b = 0.197854 + 0.122368I$	$-3.89164 + 1.83510I$	$-3.88038 - 1.67120I$
$u = -0.438971 + 0.749800I$ $a = -0.150656 - 0.909768I$ $b = -0.434634 + 0.073940I$	$-1.87656 - 2.26693I$	$-0.23419 + 4.23054I$
$u = -0.438971 - 0.749800I$ $a = -0.150656 + 0.909768I$ $b = -0.434634 - 0.073940I$	$-1.87656 + 2.26693I$	$-0.23419 - 4.23054I$

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = 1.055170 + 0.454319I$ $a = 0.350993 - 0.350907I$ $b = -0.229165 + 0.586958I$	$0.47415 + 4.77230I$	$2.90925 - 7.59230I$
$u = 1.055170 - 0.454319I$ $a = 0.350993 + 0.350907I$ $b = -0.229165 - 0.586958I$	$0.47415 - 4.77230I$	$2.90925 + 7.59230I$
$u = -1.157600 + 0.418766I$ $a = -0.250131 + 0.368235I$ $b = 0.366611 + 0.145765I$	$0.69730 - 2.30425I$	0
$u = -1.157600 - 0.418766I$ $a = -0.250131 - 0.368235I$ $b = 0.366611 - 0.145765I$	$0.69730 + 2.30425I$	0
$u = -0.617941 + 0.399224I$ $a = 0.060615 + 0.914870I$ $b = -1.57348 - 1.15912I$	$-1.23836 - 4.95401I$	$0.95024 + 9.76424I$
$u = -0.617941 - 0.399224I$ $a = 0.060615 - 0.914870I$ $b = -1.57348 + 1.15912I$	$-1.23836 + 4.95401I$	$0.95024 - 9.76424I$
$u = -0.690433 + 0.022710I$ $a = 0.340123 + 0.236436I$ $b = 0.710419 - 0.336425I$	$1.274320 - 0.061861I$	$8.91275 - 0.63325I$
$u = -0.690433 - 0.022710I$ $a = 0.340123 - 0.236436I$ $b = 0.710419 + 0.336425I$	$1.274320 + 0.061861I$	$8.91275 + 0.63325I$
$u = 0.952290 + 0.917135I$ $a = 0.86871 - 1.24612I$ $b = -2.02867 + 0.31602I$	$-5.72498 + 3.38721I$	0
$u = 0.952290 - 0.917135I$ $a = 0.86871 + 1.24612I$ $b = -2.02867 - 0.31602I$	$-5.72498 - 3.38721I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 0.663259 + 0.139973I$ $a = 0.219248 - 1.384360I$ $b = 0.12321 + 1.65156I$	$0.85103 + 2.84744I$	$6.69474 - 7.55737I$
$u = 0.663259 - 0.139973I$ $a = 0.219248 + 1.384360I$ $b = 0.12321 - 1.65156I$	$0.85103 - 2.84744I$	$6.69474 + 7.55737I$
$u = -0.864759 + 1.001780I$ $a = -0.70764 - 1.33859I$ $b = 2.09539 + 0.70588I$	$-14.6682 - 3.0850I$	0
$u = -0.864759 - 1.001780I$ $a = -0.70764 + 1.33859I$ $b = 2.09539 - 0.70588I$	$-14.6682 + 3.0850I$	0
$u = -0.934317 + 0.943776I$ $a = 1.07851 + 1.19683I$ $b = -2.15162 + 0.09289I$	$-9.73534 + 1.58904I$	0
$u = -0.934317 - 0.943776I$ $a = 1.07851 - 1.19683I$ $b = -2.15162 - 0.09289I$	$-9.73534 - 1.58904I$	0
$u = 0.325135 + 0.583617I$ $a = 1.010560 - 0.435996I$ $b = -0.100686 - 0.124770I$	$-1.73157 - 0.74220I$	$-3.53436 + 1.20207I$
$u = 0.325135 - 0.583617I$ $a = 1.010560 + 0.435996I$ $b = -0.100686 + 0.124770I$	$-1.73157 + 0.74220I$	$-3.53436 - 1.20207I$
$u = 1.213470 + 0.584928I$ $a = -0.504959 - 0.128402I$ $b = 0.658444 - 0.124156I$	$-1.32166 + 7.73642I$	0
$u = 1.213470 - 0.584928I$ $a = -0.504959 + 0.128402I$ $b = 0.658444 + 0.124156I$	$-1.32166 - 7.73642I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = -0.978343 + 0.926207I$ $a = 0.80633 + 1.44174I$ $b = -2.29946 - 0.61084I$	$-9.59881 - 8.46951I$	0
$u = -0.978343 - 0.926207I$ $a = 0.80633 - 1.44174I$ $b = -2.29946 + 0.61084I$	$-9.59881 + 8.46951I$	0
$u = 0.866755 + 1.048470I$ $a = -0.729094 + 1.119430I$ $b = 1.93255 - 0.26341I$	$-10.22760 - 1.78431I$	0
$u = 0.866755 - 1.048470I$ $a = -0.729094 - 1.119430I$ $b = 1.93255 + 0.26341I$	$-10.22760 + 1.78431I$	0
$u = -1.051530 + 0.891321I$ $a = -1.31485 - 1.07651I$ $b = 2.10442 - 0.11160I$	$-14.0441 - 3.8628I$	0
$u = -1.051530 - 0.891321I$ $a = -1.31485 + 1.07651I$ $b = 2.10442 + 0.11160I$	$-14.0441 + 3.8628I$	0
$u = -0.905222 + 1.060420I$ $a = -0.888396 - 1.029930I$ $b = 2.14464 - 0.04344I$	$-13.8372 + 7.1481I$	0
$u = -0.905222 - 1.060420I$ $a = -0.888396 + 1.029930I$ $b = 2.14464 + 0.04344I$	$-13.8372 - 7.1481I$	0
$u = 1.07786 + 0.91788I$ $a = -1.00742 + 1.16837I$ $b = 2.09175 - 0.23831I$	$-9.52196 + 8.95742I$	0
$u = 1.07786 - 0.91788I$ $a = -1.00742 - 1.16837I$ $b = 2.09175 + 0.23831I$	$-9.52196 - 8.95742I$	0

Solutions to I_1^u	$\sqrt{-1}(\mathrm{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.06846 + 0.94471I$ $a = -0.91395 - 1.39925I$ $b = 2.30191 + 0.42350I$	$-13.2732 - 14.4519I$	0
$u = -1.06846 - 0.94471I$ $a = -0.91395 + 1.39925I$ $b = 2.30191 - 0.42350I$	$-13.2732 + 14.4519I$	0
$u = 0.518541 + 0.209657I$ $a = -0.15012 - 2.09948I$ $b = -0.571793 + 1.215850I$	$0.60718 + 2.45344I$	$2.01156 - 2.44263I$
$u = 0.518541 - 0.209657I$ $a = -0.15012 + 2.09948I$ $b = -0.571793 - 1.215850I$	$0.60718 - 2.45344I$	$2.01156 + 2.44263I$
$u = -0.097000 + 0.527699I$ $a = -0.97037 - 3.44326I$ $b = -0.320461 - 0.724196I$	$-1.36020 - 1.48509I$	$-1.96785 + 10.33925I$
$u = -0.097000 - 0.527699I$ $a = -0.97037 + 3.44326I$ $b = -0.320461 + 0.724196I$	$-1.36020 + 1.48509I$	$-1.96785 - 10.33925I$
$u = -0.326195 + 0.340981I$ $a = 4.53740 + 4.91757I$ $b = -0.647629 + 0.837735I$	$-1.80837 + 2.42279I$	$4.5070 + 19.1208I$
$u = -0.326195 - 0.340981I$ $a = 4.53740 - 4.91757I$ $b = -0.647629 - 0.837735I$	$-1.80837 - 2.42279I$	$4.5070 - 19.1208I$

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

(i) Arc colorings

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

(ii) Obstruction class $= 1$

(iii) Cusp Shapes
$= 2u^5a + u^4a + u^5 - 4u^3a - 6u^4 + 5u^2a - u^3 + 3au + 7u^2 - 2a - 4u - 4$

(iv) u-Polynomials at the component

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

(v) Riley Polynomials at the component

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

(vi) Complex Volumes and Cusp Shapes

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
$u = -1.002190 + 0.295542I$ $a = 0.815127 - 0.417821I$ $b = -0.500000 + 0.866025I$	$1.89061 + 1.10558I$	$4.53097 - 2.95636I$
$u = -1.002190 + 0.295542I$ $a = -0.045720 + 0.914831I$ $b = -0.500000 - 0.866025I$	$1.89061 - 2.95419I$	$7.73749 + 4.22314I$
$u = -1.002190 - 0.295542I$ $a = 0.815127 + 0.417821I$ $b = -0.500000 - 0.866025I$	$1.89061 - 1.10558I$	$4.53097 + 2.95636I$
$u = -1.002190 - 0.295542I$ $a = -0.045720 - 0.914831I$ $b = -0.500000 + 0.866025I$	$1.89061 + 2.95419I$	$7.73749 - 4.22314I$
$u = 0.428243 + 0.664531I$ $a = 0.93136 - 1.30101I$ $b = -0.500000 - 0.866025I$	$-1.89061 - 2.95419I$	$-0.76561 + 6.31197I$
$u = 0.428243 + 0.664531I$ $a = -1.59239 - 0.15607I$ $b = -0.500000 + 0.866025I$	$-1.89061 + 1.10558I$	$-4.61123 - 3.09109I$
$u = 0.428243 - 0.664531I$ $a = 0.93136 + 1.30101I$ $b = -0.500000 + 0.866025I$	$-1.89061 + 2.95419I$	$-0.76561 - 6.31197I$
$u = 0.428243 - 0.664531I$ $a = -1.59239 + 0.15607I$ $b = -0.500000 - 0.866025I$	$-1.89061 - 1.10558I$	$-4.61123 + 3.09109I$
$u = 1.073950 + 0.558752I$ $a = 0.679704 + 0.059778I$ $b = -0.500000 - 0.866025I$	$3.66314I$	$-0.57335 - 1.75283I$
$u = 1.073950 + 0.558752I$ $a = -0.288082 - 0.618530I$ $b = -0.500000 + 0.866025I$	$7.72290I$	$3.68173 - 7.68692I$

Solutions to I_2^u	$\sqrt{-1}(\mathrm{vol}+\sqrt{-1}CS)$	Cusp shape
$u = 1.073950 - 0.558752I$ $a = 0.679704 - 0.059778I$ $b = -0.500000 + 0.866025I$	$-3.66314I$	$-0.57335 + 1.75283I$
$u = 1.073950 - 0.558752I$ $a = -0.288082 + 0.618530I$ $b = -0.500000 - 0.866025I$	$-7.72290I$	$3.68173 + 7.68692I$

III. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u^2-u+1)^6)(u^{48}+31u^{47}+\cdots+24u+1)$
c_2	$((u^2+u+1)^6)(u^{48}+7u^{47}+\cdots+12u+1)$
c_3	$((u^2-u+1)^6)(u^{48}-7u^{47}+\cdots+12u^2+1)$
c_4, c_7	$u^{12}(u^{48}+3u^{47}+\cdots-8192u+4096)$
c_5	$((u^2-u+1)^6)(u^{48}+7u^{47}+\cdots+12u+1)$
c_6	$((u^6-u^5-u^4+2u^3-u+1)^2)(u^{48}-3u^{47}+\cdots-2u+1)$
c_8	$(u^6-3u^5+5u^4-4u^3+2u^2-u+1)^2$ $\cdot(u^{48}+9u^{47}+\cdots-23626848u+3579401)$
c_9	$((u^6+u^5-u^4-2u^3+u+1)^2)(u^{48}-3u^{47}+\cdots-8u+1)$
c_{10}	$((u^6+u^5-u^4-2u^3+u+1)^2)(u^{48}-3u^{47}+\cdots-2u+1)$
c_{11}	$((u^6-u^5-u^4+2u^3-u+1)^2)(u^{48}-3u^{47}+\cdots-8u+1)$
c_{12}	$((u^6+3u^5+5u^4+4u^3+2u^2+u+1)^2)(u^{48}+29u^{47}+\cdots+8u+1)$

IV. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y^2+y+1)^6)(y^{48}-21y^{47}+\cdots+2824y+1)$
c_2, c_5	$((y^2+y+1)^6)(y^{48}+31y^{47}+\cdots+24y+1)$
c_3	$((y^2+y+1)^6)(y^{48}-73y^{47}+\cdots+24y+1)$
c_4, c_7	$y^{12}(y^{48}+65y^{47}+\cdots+1.84549\times 10^8 y+1.67772\times 10^7)$
c_6, c_{10}	$((y^6-3y^5+5y^4-4y^3+2y^2-y+1)^2)(y^{48}-9y^{47}+\cdots-8y+1)$
c_8	$(y^6+y^5+5y^4+6y^2+3y+1)^2$ $\cdot(y^{48}+83y^{47}+\cdots+697935129971156y+12812111518801)$
c_9, c_{11}	$((y^6-3y^5+5y^4-4y^3+2y^2-y+1)^2)(y^{48}-29y^{47}+\cdots-8y+1)$
c_{12}	$((y^6+y^5+5y^4+6y^2+3y+1)^2)(y^{48}-17y^{47}+\cdots+200y+1)$