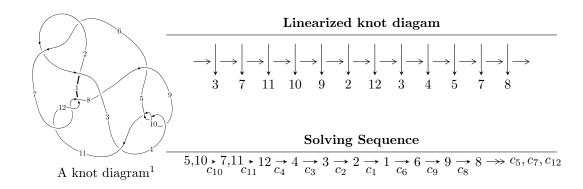
$12n_{0576} \ (K12n_{0576})$



Ideals for irreducible components² of X_{par}

$$\begin{split} I_1^u &= \langle -2u^{14} + 3u^{13} + 9u^{12} - 9u^{11} - 20u^{10} + 4u^9 + 22u^8 + 18u^7 - 3u^6 - 24u^5 - 17u^4 + 4u^3 + 5u^2 + b + 10u + 3, \\ &- 3u^{14} + 5u^{13} + 12u^{12} - 15u^{11} - 24u^{10} + 8u^9 + 24u^8 + 25u^7 - 34u^5 - 24u^4 + 5u^3 + 5u^2 + 2a + 17u + 4, \\ &- u^{15} - 3u^{14} - 2u^{13} + 11u^{12} + 2u^{11} - 16u^{10} - 6u^9 + 7u^8 + 14u^7 + 8u^6 - 10u^5 - 13u^4 + u^3 - u^2 + 6u + 2 \rangle \\ I_2^u &= \langle -u^3a - u^2a - u^3 + au - u^2 + b - a + u, \ 2u^4a + 2u^3a + 2u^4 - 3u^2a + 2u^3 + a^2 - 2au - 3u^2 + a - 3u + 1, \\ u^5 + u^4 - 2u^3 - u^2 + u - 1 \rangle \\ I_3^u &= \langle u^3 + 2u^2 + b - 2u - 2, \ 2u^3 + 3u^2 + 3a - 3u - 3, \ u^4 - 3u^2 + 3 \rangle \\ I_4^u &= \langle u^3 + b, \ u^2 + a + u - 1, \ u^4 - u^2 - 1 \rangle \end{split}$$

 $I_1^v = \langle a, b+1, v+1 \rangle$

* 5 irreducible components of $\dim_{\mathbb{C}} = 0$, with total 34 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).

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

$$I. \ I_1^u = \\ \langle -2u^{14} + 3u^{13} + \dots + b + 3, \ -3u^{14} + 5u^{13} + \dots + 2a + 4, \ u^{15} - 3u^{14} + \dots + 6u + 2 \rangle$$

(i) Arc colorings

$$a_{5} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{7} = \begin{pmatrix} \frac{3}{2}u^{14} - \frac{5}{2}u^{13} + \dots - \frac{17}{2}u - 2 \\ 2u^{14} - 3u^{13} + \dots - 10u - 3 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} \frac{1}{2}u^{14} - \frac{1}{2}u^{13} + \dots - \frac{5}{2}u^{2} - \frac{7}{2}u \\ 2u^{14} - 3u^{13} + \dots - 11u - 3 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} u \\ u \end{pmatrix}$$

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

$$a_{2} = \begin{pmatrix} \frac{1}{2}u^{14} - \frac{1}{2}u^{13} + \dots - \frac{3}{2}u - 1 \\ 2u^{14} - 3u^{13} + \dots - 10u - 3 \end{pmatrix}$$

$$a_{1} = \begin{pmatrix} \frac{3}{2}u^{14} - \frac{3}{2}u^{13} + \dots - \frac{19}{2}u - 3 \\ 7u^{14} - 11u^{13} + \dots - 39u - 11 \end{pmatrix}$$

$$a_{6} = \begin{pmatrix} -u^{5} + 2u^{3} - u \\ -u^{5} + u^{3} + u \end{pmatrix}$$

$$a_{9} = \begin{pmatrix} -u^{2} + 1 \\ -u^{2} \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} u^{10} - 5u^{8} + 8u^{6} - 3u^{4} - 3u^{2} + 1 \\ u^{12} - 4u^{10} + 4u^{8} + 2u^{6} - 3u^{4} - 2u^{2} \end{pmatrix}$$

(ii) Obstruction class = -1

(iii) Cusp Shapes
=
$$-2u^{12} + 10u^{10} + 6u^9 - 18u^8 - 24u^7 + 2u^6 + 30u^5 + 30u^4 + 2u^3 - 22u^2 - 20u - 24u^2 + 30u^4 +$$

Crossings	u-Polynomials at each crossing
c_1	$u^{15} + 27u^{14} + \dots + 21u + 1$
$c_2, c_6, c_7 \\ c_{11}, c_{12}$	$u^{15} - u^{14} + \dots - 3u - 1$
c_3,c_5	$u^{15} + 9u^{14} + \dots + 166u + 22$
c_4, c_9, c_{10}	$u^{15} - 3u^{14} + \dots + 6u + 2$
C ₈	$u^{15} + 3u^{14} + \dots + 326u + 178$

Crossings	Riley Polynomials at each crossing
c_1	$y^{15} - 91y^{14} + \dots + 125y - 1$
$c_2, c_6, c_7 \\ c_{11}, c_{12}$	$y^{15} - 27y^{14} + \dots + 21y - 1$
c_3,c_5	$y^{15} + 7y^{14} + \dots + 5336y - 484$
c_4, c_9, c_{10}	$y^{15} - 13y^{14} + \dots + 40y - 4$
c ₈	$y^{15} - 73y^{14} + \dots - 18680y - 31684$

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = -0.933456 + 0.545096I		
a = 1.35570 - 0.53655I	-16.1665 - 1.0397I	-16.7131 - 1.0217I
b = 2.15361 - 1.54045I		
u = -0.933456 - 0.545096I		
a = 1.35570 + 0.53655I	-16.1665 + 1.0397I	-16.7131 + 1.0217I
b = 2.15361 + 1.54045I		
u = -0.269872 + 0.870864I		
a = -2.11208 + 1.63104I	-14.1086 + 6.0067I	-14.4990 - 3.2830I
b = 0.313757 + 0.153473I		
u = -0.269872 - 0.870864I		
a = -2.11208 - 1.63104I	-14.1086 - 6.0067I	-14.4990 + 3.2830I
b = 0.313757 - 0.153473I		
u = -0.027957 + 0.721725I		
a = 0.449087 - 1.012280I	2.42887 + 1.37514I	-7.68727 - 5.21222I
b = 0.210760 + 0.156059I		
u = -0.027957 - 0.721725I		
a = 0.449087 + 1.012280I	2.42887 - 1.37514I	-7.68727 + 5.21222I
b = 0.210760 - 0.156059I		
u = -1.269950 + 0.268466I		
a = -0.329692 - 0.304561I	-1.39715 + 2.17673I	-12.08651 + 0.76556I
b = -1.118860 - 0.755791I		
u = -1.269950 - 0.268466I		
a = -0.329692 + 0.304561I	-1.39715 - 2.17673I	-12.08651 - 0.76556I
b = -1.118860 + 0.755791I		
u = 1.31650		
a = -0.714575	-5.38119	-18.1900
b = -0.728053		
u = 1.289830 + 0.310526I		
a = 0.355754 - 0.895009I	-1.68505 - 5.12171I	-12.9962 + 7.9827I
b = 0.71766 - 1.39362I		

Solutions to I_1^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 1.289830 - 0.310526I		
a = 0.355754 + 0.895009I	-1.68505 + 5.12171I	-12.9962 - 7.9827I
b = 0.71766 + 1.39362I		
u = 1.43481 + 0.35867I		
a = 0.18363 + 1.96597I	-19.5375 - 10.4475I	-18.0265 + 4.5376I
b = 0.25436 + 4.36591I		
u = 1.43481 - 0.35867I		
a = 0.18363 - 1.96597I	-19.5375 + 10.4475I	-18.0265 - 4.5376I
b = 0.25436 - 4.36591I		
u = 1.53735		
a = 0.453716	14.6944	-19.9400
b = -1.08285		
u = -0.300672		
a = 0.456072	-0.497687	-19.8530
b = -0.251678		

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

(i) Arc colorings

$$a_{5} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{7} = \begin{pmatrix} u^{3}a + u^{2}a + u^{3} - au + u^{2} + a - u \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u^{4}a - u^{3}a + u^{2}a - 2u^{3} + au - u^{2} + 3u + 1 \\ -u^{4}a + u^{4} + u^{2}a - u^{3} - u^{2} + 2u \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} u \\ u \end{pmatrix}$$

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

$$a_{2} = \begin{pmatrix} u^{3}a + u^{2}a + u^{3} - au + u^{2} - u \\ u^{3}a + u^{2}a + u^{3} - au + u^{2} + a - u \end{pmatrix}$$

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

$$a_{6} = \begin{pmatrix} u^{4} - u^{2} - 1 \\ u^{4} - u^{3} - u^{2} + 2u - 1 \end{pmatrix}$$

$$a_{9} = \begin{pmatrix} -u^{2} + 1 \\ -u^{2} \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} -2u^{2} + 2 \\ -2u^{2} + u \end{pmatrix}$$

- (ii) Obstruction class = -1
- (iii) Cusp Shapes = $-4u^3 + 8u 18$

Crossings	u-Polynomials at each crossing
c_1	$u^{10} + 13u^9 + \dots + 536u + 49$
$c_2, c_6, c_7 \\ c_{11}, c_{12}$	$u^{10} - u^9 - 6u^8 + 4u^7 + 18u^6 - 8u^5 - 31u^4 + 13u^3 + 28u^2 - 12u - 7$
c_3, c_5	$(u^5 - 3u^4 + 4u^3 - u^2 - u + 1)^2$
c_4, c_9, c_{10}	$(u^5 + u^4 - 2u^3 - u^2 + u - 1)^2$
C ₈	$(u^5 - u^4 + 2u^3 - u^2 + u - 1)^2$

Crossings	Riley Polynomials at each crossing
c_1	$y^{10} - 9y^9 + \dots - 137356y + 2401$
$c_2, c_6, c_7 \\ c_{11}, c_{12}$	$y^{10} - 13y^9 + \dots - 536y + 49$
c_3, c_5	$(y^5 - y^4 + 8y^3 - 3y^2 + 3y - 1)^2$
c_4, c_9, c_{10}	$(y^5 - 5y^4 + 8y^3 - 3y^2 - y - 1)^2$
C ₈	$(y^5 + 3y^4 + 4y^3 + y^2 - y - 1)^2$

Solutions to I_2^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 1.21774		
a = -0.591829	-5.69095	-15.4810
b = 0.253452		
u = 1.21774		
a = -1.53344	-5.69095	-15.4810
b = -2.63815		
u = 0.309916 + 0.549911I		
a = -1.031800 - 0.275887I	-3.61897 - 1.53058I	-14.5151 + 4.4306I
b = -1.067230 - 0.057202I		
u = 0.309916 + 0.549911I		
a = 0.68255 + 2.69529I	-3.61897 - 1.53058I	-14.5151 + 4.4306I
b = -0.024468 + 0.261280I		
u = 0.309916 - 0.549911I		
a = -1.031800 + 0.275887I	-3.61897 + 1.53058I	-14.5151 - 4.4306I
b = -1.067230 + 0.057202I		
u = 0.309916 - 0.549911I		
a = 0.68255 - 2.69529I	-3.61897 + 1.53058I	-14.5151 - 4.4306I
b = -0.024468 - 0.261280I		
u = -1.41878 + 0.21917I		
a = -0.310913 - 0.768355I	-9.16243 + 4.40083I	-18.7443 - 3.4986I
b = 0.556241 - 1.005760I		
u = -1.41878 + 0.21917I		
a = 0.72280 + 1.60293I	-9.16243 + 4.40083I	-18.7443 - 3.4986I
b = 1.22781 + 3.58963I		
u = -1.41878 - 0.21917I		
a = -0.310913 + 0.768355I	-9.16243 - 4.40083I	-18.7443 + 3.4986I
b = 0.556241 + 1.005760I		
u = -1.41878 - 0.21917I		
a = 0.72280 - 1.60293I	-9.16243 - 4.40083I	-18.7443 + 3.4986I
b = 1.22781 - 3.58963I		

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

(i) Arc colorings

$$a_{5} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{7} = \begin{pmatrix} -\frac{2}{3}u^{3} - u^{2} + u + 1 \\ -u^{3} - 2u^{2} + 2u + 2 \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} \frac{2}{3}u^{3} + u^{2} - u \\ u^{3} + 3u^{2} - 2u - 2 \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} u \\ u \end{pmatrix}$$

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

$$a_{2} = \begin{pmatrix} -\frac{1}{3}u^{3} + u^{2} + u - 1 \\ -u^{3} + 2u^{2} + 2u - 2 \end{pmatrix}$$

$$a_{1} = \begin{pmatrix} \frac{2}{3}u^{3} + u^{2} - u - 1 \\ u^{3} + 2u^{2} - 2u - 2 \end{pmatrix}$$

$$a_{6} = \begin{pmatrix} -u^{3} + 2u \\ -2u^{3} + 4u \end{pmatrix}$$

$$a_{9} = \begin{pmatrix} -u^{2} + 1 \\ -u^{2} \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

- (ii) Obstruction class = 1
- (iii) Cusp Shapes = $4u^2 24$

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

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

Solutions to I_3^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 1.271230 + 0.340625I		
a = -0.30334 - 1.59997I	-3.28987 - 4.05977I	-18.0000 + 3.4641I
b = -0.06940 - 2.66266I		
u = 1.271230 - 0.340625I		
a = -0.30334 + 1.59997I	-3.28987 + 4.05977I	-18.0000 - 3.4641I
b = -0.06940 + 2.66266I		
u = -1.271230 + 0.340625I		
a = -0.696660 + 0.132080I	-3.28987 + 4.05977I	-18.0000 - 3.4641I
b = -1.93060 + 0.80145I		
u = -1.271230 - 0.340625I		
a = -0.696660 - 0.132080I	-3.28987 - 4.05977I	-18.0000 + 3.4641I
b = -1.93060 - 0.80145I		

IV.
$$I_4^u = \langle u^3 + b, u^2 + a + u - 1, u^4 - u^2 - 1 \rangle$$

(i) Arc colorings

$$a_{5} = \begin{pmatrix} 0 \\ u \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{7} = \begin{pmatrix} -u^{2} - u + 1 \\ -u^{3} \end{pmatrix}$$

$$a_{11} = \begin{pmatrix} 1 \\ u^{2} \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} -u^{2} - u + 2 \\ -u^{3} + u^{2} \end{pmatrix}$$

$$a_{4} = \begin{pmatrix} u \\ u \end{pmatrix}$$

$$a_{3} = \begin{pmatrix} -u^{3} + 2u \\ 0 \end{pmatrix}$$

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

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

$$a_{6} = \begin{pmatrix} u^{3} - 2u \\ 0 \end{pmatrix}$$

$$a_{9} = \begin{pmatrix} -u^{2} + 1 \\ -u^{2} \end{pmatrix}$$

$$a_{8} = \begin{pmatrix} -1 \\ -u^{2} \end{pmatrix}$$

- (ii) Obstruction class = 1
- (iii) Cusp Shapes = $-4u^2 16$

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

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

Solutions to I_4^u	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
u = 0.786151I		
a = 1.61803 - 0.78615I	0.657974	-13.5280
b = 0.485868I		
u = -0.786151I		
a = 1.61803 + 0.78615I	0.657974	-13.5280
b = -0.485868I		
u = 1.27202		
a = -1.89005	-7.23771	-22.4720
b = -2.05817		
u = -1.27202		
a = 0.653986	-7.23771	-22.4720
b = 2.05817		

V.
$$I_1^v = \langle a, b+1, v+1 \rangle$$

(i) Arc colorings

$$a_5 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_{10} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

$$a_{11} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$a_{12} = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$a_4 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

$$a_3 = \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

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

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

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

$$a_9 = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

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

- (ii) Obstruction class = 1
- (iii) Cusp Shapes = -12

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

Crossings	Riley Polynomials at each crossing
$c_1, c_2, c_6 \\ c_7, c_{11}, c_{12}$	y-1
c_3, c_4, c_5 c_8, c_9, c_{10}	y

Solutions to I_1^v	$\sqrt{-1}(\text{vol} + \sqrt{-1}CS)$	Cusp shape
v = -1.00000		
a = 0	-3.28987	-12.0000
b = -1.00000		

VI. u-Polynomials

Crossings	u-Polynomials at each crossing
c_1	$((u-1)^9)(u^{10}+13u^9+\cdots+536u+49)(u^{15}+27u^{14}+\cdots+21u+1)$
c_2, c_7	$(u-1)^{5}(u+1)^{4}$ $\cdot (u^{10} - u^{9} - 6u^{8} + 4u^{7} + 18u^{6} - 8u^{5} - 31u^{4} + 13u^{3} + 28u^{2} - 12u - 7)$ $\cdot (u^{15} - u^{14} + \dots - 3u - 1)$
c_3,c_5	$u(u^{4} + u^{2} - 1)(u^{4} + 3u^{2} + 3)(u^{5} - 3u^{4} + 4u^{3} - u^{2} - u + 1)^{2}$ $\cdot (u^{15} + 9u^{14} + \dots + 166u + 22)$
c_4, c_9, c_{10}	$u(u^{4} - 3u^{2} + 3)(u^{4} - u^{2} - 1)(u^{5} + u^{4} - 2u^{3} - u^{2} + u - 1)^{2}$ $\cdot (u^{15} - 3u^{14} + \dots + 6u + 2)$
c_6, c_{11}, c_{12}	$(u-1)^{4}(u+1)^{5}$ $\cdot (u^{10} - u^{9} - 6u^{8} + 4u^{7} + 18u^{6} - 8u^{5} - 31u^{4} + 13u^{3} + 28u^{2} - 12u - 7)$ $\cdot (u^{15} - u^{14} + \dots - 3u - 1)$
c_8	$u(u^{4} + u^{2} - 1)(u^{4} + 3u^{2} + 3)(u^{5} - u^{4} + 2u^{3} - u^{2} + u - 1)^{2}$ $\cdot (u^{15} + 3u^{14} + \dots + 326u + 178)$

VII. Riley Polynomials

Crossings	Riley Polynomials at each crossing
c_1	$((y-1)^9)(y^{10} - 9y^9 + \dots - 137356y + 2401)$ $\cdot (y^{15} - 91y^{14} + \dots + 125y - 1)$
$c_2, c_6, c_7 \\ c_{11}, c_{12}$	$((y-1)^9)(y^{10}-13y^9+\cdots-536y+49)(y^{15}-27y^{14}+\cdots+21y-1)$
c_3, c_5	$y(y^{2} + y - 1)^{2}(y^{2} + 3y + 3)^{2}(y^{5} - y^{4} + 8y^{3} - 3y^{2} + 3y - 1)^{2}$ $\cdot (y^{15} + 7y^{14} + \dots + 5336y - 484)$
c_4, c_9, c_{10}	$y(y^{2} - 3y + 3)^{2}(y^{2} - y - 1)^{2}(y^{5} - 5y^{4} + 8y^{3} - 3y^{2} - y - 1)^{2}$ $\cdot (y^{15} - 13y^{14} + \dots + 40y - 4)$
c ₈	$y(y^{2} + y - 1)^{2}(y^{2} + 3y + 3)^{2}(y^{5} + 3y^{4} + 4y^{3} + y^{2} - y - 1)^{2}$ $\cdot (y^{15} - 73y^{14} + \dots - 18680y - 31684)$