

$Co_1 \pmod{11}$

	blocks	defect	matrix
$G :$	1	1	11×10
	2	1	11×10
	3	1	11×10
	4	0	$1771_1 = \chi_4, \varphi_4$
	5	0	$8855_1 = \chi_5, \varphi_5$
	6	0	$44275_1 = \chi_9, \varphi_9$
	7	0	$94875_1 = \chi_{11}, \varphi_{11}$
	8	0	$345345_1 = \chi_{13}, \varphi_{13}$
	9	0	$644644_1 = \chi_{16}, \varphi_{16}$
	10	0	$673750_1 = \chi_{17}, \varphi_{17}$
	$11 = \overline{10}$	0	$673750_2 = \chi_{18}, \varphi_{18}$
	12	0	$822250_1 = \chi_{19}, \varphi_{19}$
	13	0	$1434510_1 = \chi_{21}, \varphi_{21}$
	14	0	$1450449_1 = \chi_{22}, \varphi_{22}$
	15	0	$1771000_1 = \chi_{23}, \varphi_{23}$
	16	0	$1821600_1 = \chi_{24}, \varphi_{24}$
	17	0	$2055625_1 = \chi_{25}, \varphi_{25}$
	18	0	$2417415_1 = \chi_{26}, \varphi_{26}$
	19	0	$2877875_1 = \chi_{30}, \varphi_{30}$
	20	0	$4100096_1 = \chi_{31}, \varphi_{31}$
	21	0	$5801796_1 = \chi_{33}, \varphi_{33}$
	22	0	$9221850_1 = \chi_{35}, \varphi_{35}$
	23	0	$9669660_1 = \chi_{36}, \varphi_{36}$
	24	0	$12432420_1 = \chi_{37}, \varphi_{37}$
	25	0	$20083140_1 = \chi_{39}, \varphi_{40}$
	26	0	$21049875_1 = \chi_{40}, \varphi_{41}$
	27	0	$21579129_1 = \chi_{42}, \varphi_{42}$
	28	0	$23244375_1 = \chi_{43}, \varphi_{43}$
	29	0	$24174150_1 = \chi_{44}, \varphi_{44}$
	30	0	$24667500_1 = \chi_{45}, \varphi_{45}$
	31	0	$24794000_1 = \chi_{46}, \varphi_{46}$
	32	0	$25900875_1 = \chi_{47}, \varphi_{47}$
	33	0	$31574400_1 = \chi_{48}, \varphi_{48}$
	34	0	$40166280_1 = \chi_{49}, \varphi_{49}$
	35	0	$40370176_1 = \chi_{50}, \varphi_{50}$
	36	0	$46621575_1 = \chi_{52}, \varphi_{52}$
	37	0	$51571520_1 = \chi_{53}, \varphi_{53}$
	38	0	$55255200_1 = \chi_{54}, \varphi_{54}$
	39	0	$57544344_1 = \chi_{55}, \varphi_{55}$
	40	0	$60435375_1 = \chi_{56}, \varphi_{56}$

	blocks	defect	matrix
	41	0	$65270205_1 = \chi_{57}, \varphi_{57}$
	42	0	$66602250_1 = \chi_{58}, \varphi_{58}$
	43	0	$77702625_1 = \chi_{59}, \varphi_{60}$
	44	0	$85250880_1 = \chi_{61}, \varphi_{62}$
	45	0	$100725625_1 = \chi_{63}, \varphi_{65}$
	46	0	$184184000_1 = \chi_{68}, \varphi_{73}$
	47	0	$185912496_1 = \chi_{69}, \varphi_{74}$
	48	0	$185955000_1 = \chi_{70}, \varphi_{75}$
	49	0	$201451250_1 = \chi_{72}, \varphi_{76}$
	50	0	$207491625_1 = \chi_{74}, \varphi_{77}$
	51	0	$215547904_1 = \chi_{76}, \varphi_{78}$
	52	0	$219648000_1 = \chi_{77}, \varphi_{79}$
	53	0	$241741500_1 = \chi_{78}, \varphi_{80}$
	54	0	$251756505_1 = \chi_{80}, \varphi_{81}$
	55	0	$257857600_1 = \chi_{81}, \varphi_{82}$
	56	0	$259008750_1 = \chi_{82}, \varphi_{83}$
	57	0	$280280000_1 = \chi_{84}, \varphi_{84}$
	58	0	$299710125_1 = \chi_{86}, \varphi_{85}$
	59	0	$302176875_1 = \chi_{87}, \varphi_{86}$
	60	0	$309429120_1 = \chi_{88}, \varphi_{87}$
	61	0	$387317700_1 = \chi_{91}, \varphi_{88}$
	62	0	$402902500_1 = \chi_{92}, \varphi_{89}$
	63	0	$464257024_1 = \chi_{93}, \varphi_{90}$
	64	0	$469945476_1 = \chi_{94}, \varphi_{91}$
	65	0	$469945476_2 = \chi_{95}, \varphi_{92}$
	66	0	$483483000_1 = \chi_{96}, \varphi_{93}$
	67	0	$502078500_1 = \chi_{97}, \varphi_{94}$
	68	0	$503513010_1 = \chi_{98}, \varphi_{95}$
	69	0	$504627200_1 = \chi_{99}, \varphi_{96}$
	70	0	$522161640_1 = \chi_{100}, \varphi_{97}$
	71	0	$551675124_1 = \chi_{101}, \varphi_{98}$
$2.G :$	72	1	11×10
	73	0	$2024_1 = \chi_{103}, \varphi_{100}$
	74	1	7×5
	75	0	$4576_1 = \chi_{105}, \varphi_{102}$
	76	0	$40480_1 = \chi_{106}, \varphi_{103}$
	77	0	$170016_1 = \chi_{108}, \varphi_{105}$
	78	0	$315744_1 = \chi_{110}, \varphi_{107}$
	79	0	$388080_1 = \chi_{112}, \varphi_{109}$
	80	0	$789360_1 = \chi_{113}, \varphi_{110}$

	blocks	defect	matrix
	81	0	$1841840_1 = \chi_{114}, \varphi_{112}$
	82	0	$4004000_1 = \chi_{116}, \varphi_{113}$
	83	0	$5051904_1 = \chi_{117}, \varphi_{114}$
	84	0	$6446440_1 = \chi_{118}, \varphi_{115}$
	85	0	$6446440_2 = \chi_{119}, \varphi_{116}$
	86	0	$7104240_1 = \chi_{120}, \varphi_{117}$
	87	0	$9152000_1 = \chi_{121}, \varphi_{118}$
	$88 = \overline{87}$	0	$9152000_2 = \chi_{122}, \varphi_{119}$
	89	0	$11051040_1 = \chi_{123}, \varphi_{120}$
	90	0	$13156000_1 = \chi_{124}, \varphi_{121}$
	91	0	$15471456_1 = \chi_{127}, \varphi_{123}$
	92	0	$16170000_1 = \chi_{128}, \varphi_{124}$
	$93 = \overline{92}$	0	$16170000_2 = \chi_{129}, \varphi_{125}$
	94	0	$17050176_1 = \chi_{130}, \varphi_{126}$
	95	0	$19734000_1 = \chi_{133}, \varphi_{129}$
	96	0	$34155000_1 = \chi_{134}, \varphi_{130}$
	97	0	$40370176_2 = \chi_{135}, \varphi_{131}$
	$98 = \overline{97}$	0	$40370176_3 = \chi_{136}, \varphi_{132}$
	99	0	$44204160_1 = \chi_{137}, \varphi_{134}$
	100	0	$49335000_1 = \chi_{138}, \varphi_{135}$
	101	0	$50519040_1 = \chi_{139}, \varphi_{136}$
	102	0	$51571520_2 = \chi_{140}, \varphi_{137}$
	103	0	$67358720_1 = \chi_{145}, \varphi_{140}$
	104	0	$106260000_1 = \chi_{146}, \varphi_{141}$
	105	0	$139243104_1 = \chi_{148}, \varphi_{143}$
	106	0	$161161000_1 = \chi_{149}, \varphi_{144}$
	107	0	$190417920_1 = \chi_{150}, \varphi_{145}$
	108	0	$210496000_1 = \chi_{151}, \varphi_{147}$
	109	0	$215547904_2 = \chi_{152}, \varphi_{148}$
	110	0	$230230000_1 = \chi_{153}, \varphi_{149}$
	111	0	$247543296_1 = \chi_{154}, \varphi_{150}$
	112	0	$282906624_1 = \chi_{155}, \varphi_{151}$
	113	0	$287006720_1 = \chi_{156}, \varphi_{152}$
	114	0	$342752256_1 = \chi_{158}, \varphi_{154}$
	115	0	$394680000_1 = \chi_{160}, \varphi_{155}$
	116	0	$464143680_1 = \chi_{161}, \varphi_{156}$
	117	0	$485760000_1 = \chi_{162}, \varphi_{157}$
	118	0	$517899096_1 = \chi_{163}, \varphi_{158}$
	119	0	$557865000_1 = \chi_{164}, \varphi_{159}$
	120	0	$805805000_1 = \chi_{166}, \varphi_{160}$

	blocks	defect	matrix
	121	0	$1021620600_1 = \chi_{167}, \varphi_{161}$

Block 1:	φ_1	φ_{12}	φ_{14}	φ_{34}	φ_{38}	φ_{39}	φ_{59}	φ_{64}	φ_{68}	φ_{70}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.
$313950_1 = \chi_{12}$	1	1	.	.	.	.	.	.	.	.
$376740_1 = \chi_{14}$	.	.	1	.	.	.	.	.	.	.
$7628985_1 = \chi_{34}$	.	1	.	1	.	.	.	.	.	.
$16347825_1 = \chi_{38}$	.	.	1	.	.	1	.	.	.	.
$21528000_1 = \chi_{41}$	.	.	.	1	1	.	.	.	.	.
$83720000_1 = \chi_{60}$	.	.	.	.	.	1	1	.	.	.
$106142400_1 = \chi_{64}$	.	.	.	.	1	.	.	1	.	.
$205395750_1 = \chi_{73}$	.	.	.	.	.	.	1	.	1	.
$247235625_1 = \chi_{79}$	.	.	.	.	.	.	.	1	.	1
$292953024_1 = \chi_{85}$	.	.	.	.	.	.	.	.	1	1

$$\begin{aligned}
\varphi_1 &= 1_1 & \varphi_{39} &= 15971085_1 \\
\varphi_{12} &= 313949_1 & \varphi_{59} &= 67748915_1 \\
\varphi_{14} &= 376740_1 & \varphi_{64} &= 91929436_1 \\
\varphi_{34} &= 7315036_1 & \varphi_{68} &= 137646835_1 \\
\varphi_{38} &= 14212964_1 & \varphi_{70} &= 155306189_1
\end{aligned}$$

Block 2:	φ_2	φ_8	φ_{10}	φ_{15}	φ_{27}	φ_{28}	φ_{32}	φ_{51}	φ_{63}	φ_{67}
$276_1 = \chi_2$	1	.	.	.	.	.	.	.	.	.
$37674_1 = \chi_8$	1	1	.	.	.	.	.	.	.	.
$80730_1 = \chi_{10}$	.	.	1	.	.	.	.	.	.	.
$483000_1 = \chi_{15}$	.	1	.	1	.	.	.	.	.	.
$2464749_1 = \chi_{27}$	.	.	.	.	1	.	.	.	.	.
$2464749_2 = \chi_{28}$	.	.	.	.	.	1	.	.	.	.
$5494125_1 = \chi_{32}$	.	.	1	.	.	.	1	.	.	.
$44013375_1 = \chi_{51}$	.	.	.	1	.	.	.	1	.	.
$91547820_1 = \chi_{62}$	.	.	.	.	.	.	1	.	1	.
$163478250_1 = \chi_{67}$	.	.	.	.	.	.	.	1	.	1
$210974400_1 = \chi_{75}$	.	.	.	.	1	1	.	.	1	1

$$\begin{aligned}
\varphi_2 &= 276_1 & \varphi_{28} &= 2464749_2 \\
\varphi_8 &= 37398_1 & \varphi_{32} &= 5413395_1 \\
\varphi_{10} &= 80730_1 & \varphi_{51} &= 43567773_1 \\
\varphi_{15} &= 445602_1 & \varphi_{63} &= 86134425_1 \\
\varphi_{27} &= 2464749_1 & \varphi_{67} &= 119910477_1
\end{aligned}$$

Block 3:	φ_3	φ_6	φ_7	φ_{20}	φ_{29}	φ_{61}	φ_{66}	φ_{69}	φ_{71}	φ_{72}
$299_1 = \chi_3$	1	.	.	.	.	.	.	.	.	.
$17250_1 = \chi_6$	.	1	.	.	.	.	.	.	.	.
$27300_1 = \chi_7$	1	.	1	.	.	.	.	.	.	.
$871884_1 = \chi_{20}$	.	.	1	1	.	.	.	.	.	.
$2816856_1 = \chi_{29}$	.	1	.	.	1	.	.	.	.	.
$109882500_1 = \chi_{65}$	.	.	.	.	1	.	1	.	.	.
$150732800_1 = \chi_{66}$	.	.	.	1	.	.	.	1	.	.
$191102976_1 = \chi_{71}$	.	.	.	.	.	1	1	.	.	.
$267014475_1 = \chi_{83}$	.	.	.	.	.	1	.	.	.	1
$326956500_1 = \chi_{89}$	.	.	.	.	.	.	.	1	1	.
$360062976_1 = \chi_{90}$	.	.	.	.	.	.	.	.	1	1

$$\begin{aligned}
\varphi_3 &= 299_1 & \varphi_{61} &= 84020082_1 \\
\varphi_6 &= 17250_1 & \varphi_{66} &= 107082894_1 \\
\varphi_7 &= 27001_1 & \varphi_{69} &= 149887917_1 \\
\varphi_{20} &= 844883_1 & \varphi_{71} &= 177068583_1 \\
\varphi_{29} &= 2799606_1 & \varphi_{72} &= 182994393_1
\end{aligned}$$

Block 72:	φ_{99}	φ_{104}	φ_{106}	φ_{111}	φ_{127}	φ_{138}	φ_{139}	φ_{142}	φ_{146}	φ_{153}
$24_1 = \chi_{102}$	1	.	.	.	.	.	.	.	.	.
$95680_1 = \chi_{107}$	.	1	.	.	.	.	.	.	.	.
$299000_1 = \chi_{109}$	1	.	1	.	.	.	.	.	.	.
$1937520_1 = \chi_{115}$	.	.	1	1	.	.	.	.	.	.
$17310720_1 = \chi_{131}$	.	1	.	.	1	.	.	.	.	.
$59153976_2 = \chi_{142}$	.	.	.	.	.	1	.	.	.	.
$59153976_3 = \chi_{143}$	.	.	.	.	.	.	1	.	.	.
$112519680_1 = \chi_{147}$	.	.	.	1	.	.	.	1	.	.
$313524224_1 = \chi_{157}$	.	.	.	.	.	.	.	1	1	.
$351624000_1 = \chi_{159}$	.	.	.	.	1	.	.	.	.	1
$655360000_1 = \chi_{165}$	.	.	.	.	.	1	1	.	1	1

$$\begin{aligned}
\varphi_{99} &= 24_1 & \varphi_{138} &= 59153976_1 \\
\varphi_{104} &= 95680_1 & \varphi_{139} &= 59153976_2 \\
\varphi_{106} &= 298976_1 & \varphi_{142} &= 110881136_1 \\
\varphi_{111} &= 1638544_1 & \varphi_{146} &= 202643088_1 \\
\varphi_{127} &= 17215040_1 & \varphi_{153} &= 334408960_1
\end{aligned}$$

Block 74:	φ_{101}	φ_{108}	φ_{122}	φ_{128}	φ_{133}	
$2576_1 = \chi_{104}$	1	.	.	.	.	$\varphi_{101} = 2576_1$
$351624_1 = \chi_{111}$	1	1	.	.	.	$\varphi_{108} = 349048_1$
$15002624_1 = \chi_{125}$	.	.	1	.	.	$\varphi_{122} = 15002624_1$
$15002624_2 = \chi_{126}$	.	.	1	.	.	$\varphi_{128} = 18638648_1$
$18987696_1 = \chi_{132}$	.	1	.	1	.	$\varphi_{133} = 44151352_1$
$59153976_1 = \chi_{141}$	.	.	1	.	1	
$62790000_1 = \chi_{144}$	.	.	.	1	1	