

## $Co_2 \pmod{11}$

	blocks	defect	matrix
$G :$	1	1	$11 \times 10$
	2	0	$253_1 = \chi_3, \varphi_3$
	3	0	$275_1 = \chi_4, \varphi_4$
	4	0	$1771_1 = \chi_5, \varphi_5$
	5	0	$2024_1 = \chi_6, \varphi_6$
	6	0	$2277_1 = \chi_7, \varphi_7$
	7	0	$7084_1 = \chi_9, \varphi_9$
	8	0	$9625_1 = \chi_{10}, \varphi_{10}$
	$9 = \overline{8}$	0	$9625_2 = \chi_{11}, \varphi_{11}$
	10	0	$10395_1 = \chi_{12}, \varphi_{12}$
	$11 = \overline{10}$	0	$10395_2 = \chi_{13}, \varphi_{13}$
	12	0	$12650_1 = \chi_{14}, \varphi_{14}$
	13	0	$31625_1 = \chi_{16}, \varphi_{16}$
	14	0	$31625_2 = \chi_{17}, \varphi_{17}$
	15	0	$31878_1 = \chi_{18}, \varphi_{18}$
	16	0	$37422_1 = \chi_{19}, \varphi_{19}$
	17	0	$44275_1 = \chi_{20}, \varphi_{20}$
	18	0	$63250_1 = \chi_{21}, \varphi_{21}$
	19	0	$113850_1 = \chi_{24}, \varphi_{24}$
	20	0	$129536_1 = \chi_{25}, \varphi_{25}$
	21	0	$177100_1 = \chi_{26}, \varphi_{26}$
	22	0	$184437_1 = \chi_{27}, \varphi_{27}$
	23	0	$212520_1 = \chi_{28}, \varphi_{28}$
	24	0	$221375_1 = \chi_{29}, \varphi_{29}$
	25	0	$226688_1 = \chi_{30}, \varphi_{30}$
	26	0	$239085_1 = \chi_{31}, \varphi_{31}$
	$27 = \overline{26}$	0	$239085_2 = \chi_{32}, \varphi_{32}$
	28	0	$245916_1 = \chi_{33}, \varphi_{33}$
	29	0	$253000_1 = \chi_{34}, \varphi_{34}$
	30	0	$284625_1 = \chi_{35}, \varphi_{35}$
	31	0	$368874_1 = \chi_{37}, \varphi_{37}$
	32	0	$398475_1 = \chi_{38}, \varphi_{38}$
	33	0	$398475_2 = \chi_{39}, \varphi_{39}$
	34	0	$430353_1 = \chi_{40}, \varphi_{40}$
	35	0	$442750_1 = \chi_{41}, \varphi_{41}$
	36	0	$462000_1 = \chi_{42}, \varphi_{42}$
	37	0	$467775_1 = \chi_{43}, \varphi_{43}$
	38	0	$637560_1 = \chi_{45}, \varphi_{45}$
	39	0	$664125_1 = \chi_{46}, \varphi_{46}$
	40	0	$664125_2 = \chi_{47}, \varphi_{47}$

	blocks	defect	matrix
	41	0	664125 <sub>3</sub> = $\chi_{48}, \varphi_{48}$
	42	0	853875 <sub>1</sub> = $\chi_{49}, \varphi_{50}$
	43	0	1291059 <sub>1</sub> = $\chi_{51}, \varphi_{51}$
	44	0	1771000 <sub>1</sub> = $\chi_{52}, \varphi_{53}$
	45	0	1771000 <sub>2</sub> = $\chi_{53}, \varphi_{54}$
	46	0	1943040 <sub>1</sub> = $\chi_{55}, \varphi_{55}$
	47	0	1992375 <sub>1</sub> = $\chi_{56}, \varphi_{56}$
	48	0	2004750 <sub>1</sub> = $\chi_{57}, \varphi_{57}$
	49	0	2040192 <sub>1</sub> = $\chi_{58}, \varphi_{58}$
	50	0	2072576 <sub>1</sub> = $\chi_{59}, \varphi_{59}$

<b>Block 1:</b>	$\varphi_1$	$\varphi_2$	$\varphi_8$	$\varphi_{15}$	$\varphi_{22}$	$\varphi_{23}$	$\varphi_{36}$	$\varphi_{44}$	$\varphi_{49}$	$\varphi_{52}$
1 <sub>1</sub> = $\chi_1$	1	.	.	.	.	.	.	.	.	.
23 <sub>1</sub> = $\chi_2$	.	1	.	.	.	.	.	.	.	.
4025 <sub>1</sub> = $\chi_8$	.	1	1	.	.	.	.	.	.	.
23000 <sub>1</sub> = $\chi_{15}$	1	.	.	1	.	.	.	.	.	.
91125 <sub>1</sub> = $\chi_{22}$	.	.	.	.	1	.	.	.	.	.
91125 <sub>2</sub> = $\chi_{23}$	.	.	.	.	.	1	.	.	.	.
312984 <sub>1</sub> = $\chi_{36}$	.	.	1	.	.	.	1	.	.	.
558900 <sub>1</sub> = $\chi_{44}$	.	.	.	1	.	.	.	1	.	.
1288000 <sub>1</sub> = $\chi_{50}$	.	.	.	.	1	1	1	.	1	.
1835008 <sub>1</sub> = $\chi_{54}$	.	.	.	.	.	.	.	1	.	1
2095875 <sub>1</sub> = $\chi_{60}$	.	.	.	.	.	.	.	.	1	1

$$\begin{array}{ll}
\varphi_1 & = 1_1 \\
\varphi_2 & = 23_1 \\
\varphi_8 & = 4002_1 \\
\varphi_{15} & = 22999_1 \\
\varphi_{22} & = 91125_1 \\
\varphi_{23} & = 91125_2 \\
\varphi_{36} & = 308982_1 \\
\varphi_{44} & = 535901_1 \\
\varphi_{49} & = 796768_1 \\
\varphi_{52} & = 1299107_1
\end{array}$$