

## $A_{13}.2 \pmod{11}$

	blocks	defect	matrix
$G :$	1	1	$11 \times 10$
	2	1	$11 \times 10$
	3	0	$66_1 = \chi_{4,0}, \varphi_{4,0}$
	4	0	$66_2 = \chi_{4,1}, \varphi_{4,1}$
	5	0	$220_1 = \chi_{6,0}, \varphi_{6,0}$
	6	0	$220_2 = \chi_{6,1}, \varphi_{6,1}$
	7	0	$429_1 = \chi_{7,0}, \varphi_{7,0}$
	8	0	$429_2 = \chi_{7,1}, \varphi_{7,1}$
	9	0	$429_3 = \chi_{8,0}, \varphi_{8,0}$
	10	0	$429_4 = \chi_{8,1}, \varphi_{8,1}$
	11	0	$429_5 = \chi_{9,0}, \varphi_{9,0}$
	12	0	$429_6 = \chi_{9,1}, \varphi_{9,1}$
	13	0	$924_1 = \chi_{10+}, \varphi_{10+}$
	14	0	$495_1 = \chi_{12,0}, \varphi_{12,0}$
	15	0	$495_2 = \chi_{12,1}, \varphi_{12,1}$
	16	0	$572_1 = \chi_{13,0}, \varphi_{13,0}$
	17	0	$572_2 = \chi_{13,1}, \varphi_{13,1}$
	18	0	$792_1 = \chi_{14,0}, \varphi_{14,0}$
	19	0	$792_2 = \chi_{14,1}, \varphi_{14,1}$
	20	0	$1287_1 = \chi_{16,0}, \varphi_{17,0}$
	21	0	$1287_2 = \chi_{16,1}, \varphi_{17,1}$
	22	0	$1430_1 = \chi_{18,0}, \varphi_{18,0}$
	23	0	$1430_2 = \chi_{18,1}, \varphi_{18,1}$
	24	0	$2574_1 = \chi_{19,0}, \varphi_{19,0}$
	25	0	$2574_2 = \chi_{19,1}, \varphi_{19,1}$
	26	0	$2574_3 = \chi_{20,0}, \varphi_{20,0}$
	27	0	$2574_4 = \chi_{20,1}, \varphi_{20,1}$
	28	0	$2860_1 = \chi_{21,0}, \varphi_{22,0}$
	29	0	$2860_2 = \chi_{21,1}, \varphi_{22,1}$
	30	0	$3003_1 = \chi_{22,0}, \varphi_{23,0}$
	31	0	$3003_2 = \chi_{22,1}, \varphi_{23,1}$
	32	0	$3432_1 = \chi_{23,0}, \varphi_{25,0}$
	33	0	$3432_2 = \chi_{23,1}, \varphi_{25,1}$
	34	0	$3432_3 = \chi_{24,0}, \varphi_{26,0}$
	35	0	$3432_4 = \chi_{24,1}, \varphi_{26,1}$
	36	0	$3432_5 = \chi_{25,0}, \varphi_{27,0}$
	37	0	$3432_6 = \chi_{25,1}, \varphi_{27,1}$
	38	0	$3575_1 = \chi_{26,0}, \varphi_{28,0}$
	39	0	$3575_2 = \chi_{26,1}, \varphi_{28,1}$
	40	0	$4004_1 = \chi_{28,0}, \varphi_{29,0}$

	blocks	defect	matrix
	41	0	$4004_2 = \chi_{28,1}, \varphi_{29,1}$
	42	0	$4290_1 = \chi_{30,0}, \varphi_{30,0}$
	43	0	$4290_2 = \chi_{30,1}, \varphi_{30,1}$
	44	0	$8580_1 = \chi_{31+}, \varphi_{31+}$
	45	0	$5005_1 = \chi_{33,0}, \varphi_{35,0}$
	46	0	$5005_2 = \chi_{33,1}, \varphi_{35,1}$
	47	0	$5148_1 = \chi_{34,0}, \varphi_{36,0}$
	48	0	$5148_2 = \chi_{34,1}, \varphi_{36,1}$
	49	0	$5720_1 = \chi_{35,0}, \varphi_{37,0}$
	50	0	$5720_2 = \chi_{35,1}, \varphi_{37,1}$
	51	0	$6006_1 = \chi_{36,0}, \varphi_{38,0}$
	52	0	$6006_2 = \chi_{36,1}, \varphi_{38,1}$
	53	0	$6435_1 = \chi_{37,0}, \varphi_{39,0}$
	54	0	$6435_2 = \chi_{37,1}, \varphi_{39,1}$
	55	0	$6864_1 = \chi_{38,0}, \varphi_{40,0}$
	56	0	$6864_2 = \chi_{38,1}, \varphi_{40,1}$
	57	0	$16016_1 = \chi_{41+}, \varphi_{41+}$
	58	0	$8580_2 = \chi_{43,0}, \varphi_{43,0}$
	59	0	$8580_3 = \chi_{43,1}, \varphi_{43,1}$
	60	0	$9009_1 = \chi_{44,0}, \varphi_{44,0}$
	61	0	$9009_2 = \chi_{44,1}, \varphi_{44,1}$
	62	0	$10296_1 = \chi_{46,0}, \varphi_{45,0}$
	63	0	$10296_2 = \chi_{46,1}, \varphi_{45,1}$
	64	0	$11440_1 = \chi_{47,0}, \varphi_{46,0}$
	65	0	$11440_2 = \chi_{47,1}, \varphi_{46,1}$
	66	0	$11583_1 = \chi_{48,0}, \varphi_{47,0}$
	67	0	$11583_2 = \chi_{48,1}, \varphi_{47,1}$
	68	0	$12012_1 = \chi_{49,0}, \varphi_{48,0}$
	69	0	$12012_2 = \chi_{49,1}, \varphi_{48,1}$
	70	0	$12012_3 = \chi_{50,0}, \varphi_{49,0}$
	71	0	$12012_4 = \chi_{50,1}, \varphi_{49,1}$
	72	0	$12870_1 = \chi_{51,0}, \varphi_{50,0}$
	73	0	$12870_2 = \chi_{51,1}, \varphi_{50,1}$
	74	0	$15015_1 = \chi_{52,0}, \varphi_{51,0}$
	75	0	$15015_2 = \chi_{52,1}, \varphi_{51,1}$
	76	0	$17160_1 = \chi_{53,0}, \varphi_{52,0}$
	77	0	$17160_2 = \chi_{53,1}, \varphi_{52,1}$
	78	0	$20592_1 = \chi_{54,0}, \varphi_{53,0}$
	79	0	$20592_2 = \chi_{54,1}, \varphi_{53,1}$
	80	0	$21450_1 = \chi_{55,0}, \varphi_{54,0}$



$$\begin{array}{ll}
\varphi_{1,0} = 1_1 & \varphi_{16,0} = 1158_1 \\
\varphi_{2,1} = 12_2 & \varphi_{21,1} = 2757_2 \\
\varphi_{3,1} = 53_2 & \varphi_{24,0} = 3054_1 \\
\varphi_{5,0} = 207_1 & \varphi_{33,1} = 4614_2 \\
\varphi_{15,1} = 883_2 & \varphi_{34,0} = 4746_1
\end{array}$$

Block 2:	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{3,0}$	$\varphi_{5,1}$	$\varphi_{15,0}$	$\varphi_{16,1}$	$\varphi_{21,0}$	$\varphi_{24,1}$	$\varphi_{33,0}$	$\varphi_{34,1}$
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.	.
$12_1 = \chi_{2,0}$	.	1	.	.	.	.	.	.	.	.
$65_1 = \chi_{3,0}$	.	1	1	.	.	.	.	.	.	.
$208_2 = \chi_{5,1}$	1	.	.	1	.	.	.	.	.	.
$936_1 = \chi_{15,0}$	.	.	1	.	1	.	.	.	.	.
$1365_2 = \chi_{17,1}$	.	.	.	1	.	1	.	.	.	.
$3640_1 = \chi_{27,0}$	.	.	.	.	1	.	1	.	.	.
$4212_2 = \chi_{29,1}$	.	.	.	.	.	1	.	1	.	.
$7371_1 = \chi_{39,0}$	.	.	.	.	.	.	1	.	1	.
$7800_2 = \chi_{40,1}$	.	.	.	.	.	.	.	1	.	1
$9360_2 = \chi_{45,1}$	.	.	.	.	.	.	.	.	1	1

$$\begin{array}{ll}
\varphi_{1,1} = 1_2 & \varphi_{16,1} = 1158_2 \\
\varphi_{2,0} = 12_1 & \varphi_{21,0} = 2757_1 \\
\varphi_{3,0} = 53_1 & \varphi_{24,1} = 3054_2 \\
\varphi_{5,1} = 207_2 & \varphi_{33,0} = 4614_1 \\
\varphi_{15,0} = 883_1 & \varphi_{34,1} = 4746_2
\end{array}$$

Block 82:	$\varphi_{55+}$	$\varphi_{58+}$	$\varphi_{60+}$	$\varphi_{72+}$	$\varphi_{74+}$
$64_1 = \chi_{56+}$	1	.	.	.	.
$1728_1 = \chi_{59,0}$	1	1	.	.	.
$1728_2 = \chi_{59,1}$	1	1	.	.	.
$4992_1 = \chi_{60+}$	.	1	1	.	.
$22464_1 = \chi_{72+}$	.	.	1	1	.
$22464_2 = \chi_{74+}$	.	.	.	.	1
$41600_1 = \chi_{81+}$	.	.	.	1	1

$$\begin{array}{ll}
\varphi_{55+} = 64_1 & \\
\varphi_{58+} = 1664_1 & \\
\varphi_{60+} = 3328_1 & \\
\varphi_{72+} = 19136_1 & \\
\varphi_{74+} = 22464_1 &
\end{array}$$