

$L_4(3).2_1 \pmod{13}$

	blocks	defect	matrix
$G :$	1	1	7×3
	2	1	7×3
	3	0	$52_1 = \chi_{2+}, \varphi_{2+}$
	4	0	$39_1 = \chi_{4,0}, \varphi_{4,0}$
	5	0	$39_2 = \chi_{4,1}, \varphi_{4,1}$
	6	0	$52_2 = \chi_{5,0}, \varphi_{5,0}$
	$7 = \overline{6}$	0	$52_3 = \chi_{5,1}, \varphi_{5,1}$
	8	0	$130_1 = \chi_{6+}, \varphi_{6+}$
	9	0	$468_1 = \chi_{9+}, \varphi_{9+}$
	10	0	$520_1 = \chi_{11+}, \varphi_{11+}$
	11	0	$260_1 = \chi_{13,0}, \varphi_{13,0}$
	12	0	$260_2 = \chi_{13,1}, \varphi_{13,1}$
	13	0	$351_1 = \chi_{14,0}, \varphi_{14,0}$
	14	0	$351_2 = \chi_{14,1}, \varphi_{14,1}$
	15	0	$390_1 = \chi_{15,0}, \varphi_{15,0}$
	16	0	$390_2 = \chi_{15,1}, \varphi_{15,1}$
	17	0	$416_1 = \chi_{16,0}, \varphi_{16,0}$
	18	0	$416_2 = \chi_{16,1}, \varphi_{16,1}$
	19	0	$416_3 = \chi_{17,0}, \varphi_{17,0}$
	$20 = \overline{19}$	0	$416_4 = \chi_{17,1}, \varphi_{17,1}$
	21	0	$416_5 = \chi_{18,0}, \varphi_{18,0}$
	22	0	$416_6 = \chi_{18,1}, \varphi_{18,1}$
	$23 = \overline{21}$	0	$416_7 = \chi_{19,0}, \varphi_{19,0}$
	$24 = \overline{22}$	0	$416_8 = \chi_{19,1}, \varphi_{19,1}$
	25	0	$468_2 = \chi_{20,0}, \varphi_{20,0}$
	$26 = \overline{25}$	0	$468_3 = \chi_{20,1}, \varphi_{20,1}$
	27	0	$1170_1 = \chi_{21+}, \varphi_{21+}$
	28	0	$780_1 = \chi_{28,0}, \varphi_{24,0}$
	29	0	$780_2 = \chi_{28,1}, \varphi_{24,1}$
	30	0	$1040_1 = \chi_{29,0}, \varphi_{25,0}$
	$31 = \overline{30}$	0	$1040_2 = \chi_{29,1}, \varphi_{25,1}$
$2.G :$	32	1	7×3
	33	1	7×3
	34	0	$416_9 = \chi_{31+}, \varphi_{27+}$
	$35 = \overline{34}$	0	$416_{10} = \chi_{32+}, \varphi_{28+}$
	36	0	$260_3 = \chi_{35,0}, \varphi_{31,0}$
	37	0	$260_4 = \chi_{35,1}, \varphi_{31,1}$
	$38 = \overline{36}$	0	$260_5 = \chi_{36,0}, \varphi_{32,0}$
	$39 = \overline{37}$	0	$260_6 = \chi_{36,1}, \varphi_{32,1}$
	40	0	$416_{11} = \chi_{37,0}, \varphi_{33,0}$

	blocks	defect	matrix
	41	0	$416_{12} = \chi_{37,1}, \varphi_{33,1}$
	$42 = \overline{40}$	0	$416_{13} = \chi_{38,0}, \varphi_{34,0}$
	$43 = \overline{41}$	0	$416_{14} = \chi_{38,1}, \varphi_{34,1}$
	44	0	$416_{15} = \chi_{39,0}, \varphi_{35,0}$
	45	0	$416_{16} = \chi_{39,1}, \varphi_{35,1}$
	$46 = \overline{44}$	0	$416_{17} = \chi_{40,0}, \varphi_{36,0}$
	$47 = \overline{45}$	0	$416_{18} = \chi_{40,1}, \varphi_{36,1}$
	48	0	$520_2 = \chi_{42,0}, \varphi_{37,0}$
	$49 = \overline{48}$	0	$520_3 = \chi_{42,1}, \varphi_{37,1}$
	50	0	$1040_3 = \chi_{43+}, \varphi_{38+}$
	51	0	$780_3 = \chi_{49,0}, \varphi_{42,0}$
	52	0	$780_4 = \chi_{49,1}, \varphi_{42,1}$
	$53 = \overline{51}$	0	$780_5 = \chi_{50,0}, \varphi_{43,0}$
	$54 = \overline{52}$	0	$780_6 = \chi_{50,1}, \varphi_{43,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{8,0}$	$\varphi_{23,0}$	
$1_1 = \chi_{1,0}$	1	.	.	
$90_1 = \chi_{8,0}$	1	1	.	$\varphi_{1,0} = 1_1$
$640_1 = \chi_{23,0}$	.	.	1	$\varphi_{8,0} = 89_1$
$640_3 = \chi_{24,0}$	.	.	1	$\varphi_{23,0} = 640_1$
$640_5 = \chi_{25,0}$	.	.	1	
$640_7 = \chi_{26,0}$	.	.	1	
$729_1 = \chi_{27,0}$	.	1	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{8,1}$	$\varphi_{23,1}$	
$1_2 = \chi_{1,1}$	1	.	.	
$90_2 = \chi_{8,1}$	1	1	.	$\varphi_{1,1} = 1_2$
$640_2 = \chi_{23,1}$	.	.	1	$\varphi_{8,1} = 89_2$
$640_4 = \chi_{24,1}$	.	.	1	$\varphi_{23,1} = 640_2$
$640_6 = \chi_{25,1}$	.	.	1	
$640_8 = \chi_{26,1}$	.	.	1	
$729_2 = \chi_{27,1}$	.	1	1	

Block 32:	$\varphi_{26,0}$	$\varphi_{40,0}$	$\varphi_{41,0}$
$40_1 = \chi_{30,0}$	1	.	.
$480_1 = \chi_{41,0}$	1	1	.
$640_{10} = \chi_{45,1}$	.	.	1
$640_{12} = \chi_{46,1}$	.	.	1
$640_{14} = \chi_{47,1}$	.	.	1
$640_{16} = \chi_{48,1}$	.	.	1
$1080_1 = \chi_{51,0}$	.	1	1

$$\begin{aligned} \varphi_{26,0} &= 40_1 \\ \varphi_{40,0} &= 440_1 \\ \varphi_{41,0} &= 640_3 \end{aligned}$$

Block 33:	$\varphi_{26,1}$	$\varphi_{40,1}$	$\varphi_{41,1}$
$40_2 = \chi_{30,1}$	1	.	.
$480_2 = \chi_{41,1}$	1	1	.
$640_9 = \chi_{45,0}$	.	.	1
$640_{11} = \chi_{46,0}$	.	.	1
$640_{13} = \chi_{47,0}$	.	.	1
$640_{15} = \chi_{48,0}$	.	.	1
$1080_2 = \chi_{51,1}$	.	1	1

$$\begin{aligned} \varphi_{26,1} &= 40_2 \\ \varphi_{40,1} &= 440_2 \\ \varphi_{41,1} &= 640_4 \end{aligned}$$