

$G_2(4).2 \pmod{3}$

	blocks	defect	matrix
$G :$	1	3	14×7
	2	3	14×7
	3	0	$378_1 = \chi_{9,0}, \varphi_{6,0}$
	$4 = \bar{3}$	0	$378_2 = \chi_{9,1}, \varphi_{6,1}$
	5	1	3×2
	6	1	3×2
	7	1	3×2

	blocks	defect	matrix
	8	0	$9450_1 = \chi_{30+}, \varphi_{18+}$
$2.G :$	9	3	13×8
	10	1	3×2
	$11 = \bar{10}$	1	3×2
	12	1	3×1
	13	1	3×1

Block 1:	$\varphi_{1,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{4,1}$	$\varphi_{5,1}$	$\varphi_{7,0}$	$\varphi_{13,0}$	
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.
$65_2 = \chi_{2,1}$	1	1	.	.	.	.	.
$78_1 = \chi_{3,0}$	.	.	1	.	.	.	.
$300_2 = \chi_{4,1}$	.	.	.	.	1	.	.	$\varphi_{1,0} = 1_1$
$300_4 = \chi_{5,1}$	.	.	.	.	1	.	.	$\varphi_{2,1} = 64_2$
$350_2 = \chi_{6,1}$	.	1	.	1	.	.	.	$\varphi_{3,0} = 78_1$
$364_2 = \chi_{7,1}$	.	1	.	.	1	.	.	$\varphi_{4,1} = 286_2$
$364_4 = \chi_{8,1}$	.	.	1	1	.	.	.	$\varphi_{5,1} = 300_2$
$650_1 = \chi_{10,0}$	1	.	.	.	.	1	.	$\varphi_{7,0} = 649_1$
$1300_2 = \chi_{15,1}$	1	1	.	1	1	1	.	$\varphi_{13,0} = 3147_1$
$1365_2 = \chi_{16,1}$	2	1	1	2	.	1	.	
$4096_1 = \chi_{28,0}$	.	.	.	.	1	1	1	
$4160_1 = \chi_{29,0}$	.	.	1	1	.	1	1	
$5460_1 = \chi_{32,0}$	1	2	.	1	2	2	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{5,0}$	$\varphi_{7,1}$	$\varphi_{13,1}$	
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.
$65_1 = \chi_{2,0}$	1	1	.	.	.	.	.
$78_2 = \chi_{3,1}$	.	.	1	.	.	.	.	$\varphi_{1,1} = 1_2$
$300_1 = \chi_{4,0}$	.	.	.	.	1	.	.	$\varphi_{2,0} = 64_1$
$300_3 = \chi_{5,0}$	.	.	.	.	1	.	.	$\varphi_{3,1} = 78_2$
$350_1 = \chi_{6,0}$	.	1	.	1	.	.	.	$\varphi_{4,0} = 286_1$
$364_1 = \chi_{7,0}$	.	1	.	.	1	.	.	$\varphi_{5,0} = 300_1$
$364_3 = \chi_{8,0}$	.	.	1	1	.	.	.	$\varphi_{7,1} = 649_2$
$650_2 = \chi_{10,1}$	1	.	.	.	.	1	.	$\varphi_{13,1} = 3147_2$
$1300_1 = \chi_{15,0}$	1	1	.	1	1	1	.	
$1365_1 = \chi_{16,0}$	2	1	1	2	.	1	.	
$4096_2 = \chi_{28,1}$	.	.	.	.	1	1	1	
$4160_2 = \chi_{29,1}$	.	.	1	1	.	1	1	
$5460_2 = \chi_{32,1}$	1	2	.	1	2	2	1	

Block 5:	φ_{8+}	φ_{14+}	
$1638_1 = \chi_{11+}$	1	.	$\varphi_{8+} = 1638_1$
$6552_1 = \chi_{20+}$	.	1	$\varphi_{14+} = 6552_1$
$8190_1 = \chi_{24+}$	1	1	

Block 6:	φ_{10+}	φ_{16+}	
$1638_2 = \chi_{13+}$	1	.	$\varphi_{10+} = 1638_2$
$6552_2 = \chi_{22+}$	.	1	$\varphi_{16+} = 6552_2$
$8190_2 = \chi_{26+}$	1	1	

Block 7:	$\varphi_{12,0}$	$\varphi_{12,1}$	
$5850_1 = \chi_{17+}$	1	1	$\varphi_{12,0} = 2925_1$
$2925_1 = \chi_{19,0}$	1	.	$\varphi_{12,1} = 2925_2$
$2925_2 = \chi_{19,1}$	.	1	

Block 9:	$\varphi_{20,0}$	$\varphi_{20,1}$	φ_{21+}	$\varphi_{23,0}$	$\varphi_{23,1}$	φ_{25+}	$\varphi_{32,0}$	$\varphi_{32,1}$
$12_1 = \chi_{33,0}$	1	.	.	.	.	.	.	.
$12_2 = \chi_{33,1}$	.	1	.	.	.	.	.	.
$208_1 = \chi_{34+}$	.	.	1	.	.	.	.	.
$364_5 = \chi_{36,0}$	.	1	.	1	.	.	.	.
$364_6 = \chi_{36,1}$	1	.	.	.	1	.	.	.
$560_1 = \chi_{37,0}$	.	.	1	1	.	.	.	.
$560_2 = \chi_{37,1}$	.	.	1	.	1	.	.	.
$3640_1 = \chi_{41+}$	.	.	1	1	1	1	.	.
$4368_1 = \chi_{44+}$	1	1	1	2	2	1	.	.
$7800_1 = \chi_{50+}$	1	1	.	.	.	.	1	1
$4096_3 = \chi_{52,0}$	.	.	1	.	.	.	1	.
$4096_4 = \chi_{52,1}$	.	.	1	.	.	.	.	1
$11648_1 = \chi_{53+}$	1	1	2	1	1	1	1	1

$$\begin{aligned}
\varphi_{20,0} &= 12_1 & \varphi_{23,1} &= 352_2 \\
\varphi_{20,1} &= 12_2 & \varphi_{25+} &= 2728_1 \\
\varphi_{21+} &= 208_1 & \varphi_{32,0} &= 3888_1 \\
\varphi_{23,0} &= 352_1 & \varphi_{32,1} &= 3888_2
\end{aligned}$$

Block 10:	$\varphi_{24,0}$	$\varphi_{29,1}$
$1260_1 = \chi_{38,0}$	1	.
$2016_2 = \chi_{43,1}$	.	1
$3276_2 = \chi_{46,1}$	1	1

$$\begin{aligned}
\varphi_{24,0} &= 1260_1 \\
\varphi_{29,1} &= 2016_2
\end{aligned}$$

Block 11:	$\varphi_{24,1}$	$\varphi_{29,0}$
$1260_2 = \chi_{38,1}$	1	.
$2016_1 = \chi_{43,0}$	.	1
$3276_1 = \chi_{46,0}$	1	1

$$\begin{aligned}
\varphi_{24,1} &= 1260_2 \\
\varphi_{29,0} &= 2016_1
\end{aligned}$$

Block 12:	φ_{27+}
$3600_1 = \chi_{39+}$	1
$3600_2 = \chi_{47,0}$	1
$3600_3 = \chi_{47,1}$	1

$$\varphi_{27+} = 3600_1$$

Block 13:	φ_{30+}
$7488_1 = \chi_{48+}$	1
$7488_2 = \chi_{55,0}$	1
$7488_3 = \chi_{55,1}$	1

$$\varphi_{30+} = 7488_1$$