

# $L_4(3) \pmod{3}$

	blocks	defect	matrix
$G :$	1 2	6 0	$28 \times 14$ $729_1 = \chi_{27}, \varphi_{15}$
$2.G :$	3	6	$22 \times 12$

<b>Block 1:</b>	$\varphi_1$	$\varphi_2$	$\varphi_3$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_7$	$\varphi_8$	$\varphi_9$	$\varphi_{10}$	$\varphi_{11}$	$\varphi_{12}$	$\varphi_{13}$	$\varphi_{14}$
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$26_1 = \chi_2$	1	1	.	.	.	1	.	.	.	.	.	.	.	.
$26_2 = \chi_3$	1	1	.	.	.	1	.	.	.	.	.	.	.	.
$39_1 = \chi_4$	.	.	1	1	.	1	.	.	.	.	.	.	.	.
$52_1 = \chi_5$	2	1	.	.	.	.	1	.	.	.	.	.	.	.
$65_1 = \chi_6$	.	1	.	.	1	.	1	.	.	.	.	.	.	.
$65_2 = \chi_7$	.	1	.	.	1	.	1	.	.	.	.	.	.	.
$90_1 = \chi_8$	2	.	.	.	.	1	.	.	.	1	.	.	.	.
$234_1 = \chi_9$	2	1	1	1	2	1	2	.	.	1	.	.	.	.
$234_2 = \chi_{10}$	2	1	1	1	2	1	2	.	.	1	.	.	.	.
$260_1 = \chi_{11}$	.	1	1	1	1	1	1	.	.	.	.	.	1	.
$260_2 = \chi_{12}$	.	1	1	1	1	1	1	.	.	.	.	.	1	.
$260_3 = \chi_{13}$	3	2	1	1	2	2	2	.	.	1	.	.	.	.
$351_1 = \chi_{14}$	.	.	.	.	2	.	.	.	.	1	1	1	.	.
$390_1 = \chi_{15}$	1	.	2	2	1	.	2	1	1	.	.	.	1	.
$416_1 = \chi_{16}$	3	2	1	1	2	2	2	.	.	1	.	.	1	.
$416_2 = \chi_{17}$	2	3	1	1	.	2	1	.	.	.	.	.	.	1
$416_3 = \chi_{18}$	.	.	2	1	1	.	1	1	.	.	.	1	1	.
$416_4 = \chi_{19}$	.	.	1	2	1	.	1	.	1	.	1	.	1	.
$468_1 = \chi_{20}$	.	.	2	2	.	.	1	1	1	.	.	.	.	1
$585_1 = \chi_{21}$	1	2	2	2	.	2	1	.	.	.	.	.	1	1
$585_2 = \chi_{22}$	1	2	2	2	.	2	1	.	.	.	.	.	1	1
$640_1 = \chi_{23}$	1	2	2	3	.	2	1	.	1	.	.	.	1	1
$640_2 = \chi_{24}$	1	2	3	2	.	2	1	1	.	.	.	.	1	1
$640_3 = \chi_{25}$	2	1	2	2	3	1	3	1	.	1	.	1	1	.
$640_4 = \chi_{26}$	2	1	2	2	3	1	3	.	1	1	1	.	1	.
$780_1 = \chi_{28}$	1	.	3	3	3	1	2	1	1	1	1	1	1	.
$1040_1 = \chi_{29}$	2	3	4	4	2	2	4	1	1	.	.	.	2	1

$$\begin{array}{ll}
\varphi_1 = 1_1 & \varphi_8 = 45_1 \\
\varphi_2 = 6_1 & \varphi_9 = 45_2 \\
\varphi_3 = 10_1 & \varphi_{10} = 69_1 \\
\varphi_4 = 10_2 & \varphi_{11} = 126_1 \\
\varphi_5 = 15_1 & \varphi_{12} = 126_2 \\
\varphi_6 = 19_1 & \varphi_{13} = 156_1 \\
\varphi_7 = 44_1 & \varphi_{14} = 294_1
\end{array}$$

<b>Block 3:</b>	$\varphi_{16}$	$\varphi_{17}$	$\varphi_{18}$	$\varphi_{19}$	$\varphi_{20}$	$\varphi_{21}$	$\varphi_{22}$	$\varphi_{23}$	$\varphi_{24}$	$\varphi_{25}$	$\varphi_{26}$	$\varphi_{27}$
$40_1 = \chi_{30}$	1	1	1	1	.	.	.	.	.	.	.	.
$208_1 = \chi_{31}$	3	1	.	1	.	.	.	1	.	1	.	.
$208_2 = \chi_{32}$	1	3	1	.	.	.	1	.	1	.	.	.
$208_3 = \chi_{33}$	3	1	.	1	.	.	.	1	.	1	.	.
$208_4 = \chi_{34}$	1	3	1	.	.	.	1	.	1	.	.	.
$260_4 = \chi_{35}$	2	2	1	1	1	.	.	1	1	.	.	.
$260_5 = \chi_{36}$	2	2	1	1	.	1	1	.	.	1	.	.
$416_5 = \chi_{37}$	3	2	1	1	1	1	.	1	1	1	.	.
$416_6 = \chi_{38}$	2	3	1	1	1	1	1	.	1	1	.	.
$416_7 = \chi_{39}$	1	1	2	1	.	.	.	.	.	.	1	.
$416_8 = \chi_{40}$	1	1	1	2	.	.	.	.	.	.	.	1
$480_1 = \chi_{41}$	3	3	1	1	1	1	1	1	1	1	.	.
$520_1 = \chi_{42}$	4	4	2	2	1	1	1	1	1	1	.	.
$520_2 = \chi_{43}$	4	4	2	2	1	1	1	1	1	1	.	.
$520_3 = \chi_{44}$	4	4	2	2	1	1	1	1	1	1	.	.
$640_5 = \chi_{45}$	3	2	2	1	1	.	.	1	1	.	1	.
$640_6 = \chi_{46}$	2	3	1	2	.	1	1	.	.	1	.	1
$640_7 = \chi_{47}$	6	3	1	3	1	1	.	2	1	2	.	.
$640_8 = \chi_{48}$	3	6	3	1	1	1	2	.	2	1	.	.
$780_2 = \chi_{49}$	3	4	2	2	.	1	1	.	1	1	.	1
$780_3 = \chi_{50}$	4	3	2	2	1	.	.	1	1	1	1	.
$1080_1 = \chi_{51}$	4	4	3	3	.	.	.	.	1	1	1	1

$$\begin{array}{ll}
\varphi_{16} = 4_1 & \varphi_{22} = 60_1 \\
\varphi_{17} = 4_2 & \varphi_{23} = 60_2 \\
\varphi_{18} = 16_1 & \varphi_{24} = 116_1 \\
\varphi_{19} = 16_2 & \varphi_{25} = 116_2 \\
\varphi_{20} = 36_1 & \varphi_{26} = 360_1 \\
\varphi_{21} = 36_2 & \varphi_{27} = 360_2
\end{array}$$