

$L_2(31) \pmod{31}$

	blocks	defect	matrix
$G :$	1 2	1 0	17×15 $31_1 = \chi_{11}, \varphi_{16}$
$2.G :$	3	1	17×15

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}	φ_{15}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$15_1 = \chi_2$	1	.	.	.	.	.	.	.
$15_2 = \chi_3$	1	.	.	.	.	.	.	.
$30_1 = \chi_4$.	.	.	1	.	.	.	.	.	.	.	1	.	.	.
$30_2 = \chi_5$.	1	.	.	.	.	.	.	.	.	.	.	.	1	.
$30_3 = \chi_6$	1	.	.	.	1	.	.	.	.	.
$30_4 = \chi_7$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$30_5 = \chi_8$	1	.	.	.	.	.	1	.	.	.	.
$30_6 = \chi_9$	1	.	1	.	.	.	.	.	.
$30_7 = \chi_{10}$.	.	1	.	.	.	.	.	.	.	.	.	1	.	.
$32_1 = \chi_{12}$	1	.	.	.	.	1	.	.	.	.
$32_2 = \chi_{13}$.	.	.	1	.	.	.	.	.	.	.	.	1	.	.
$32_3 = \chi_{14}$	1	.	.	1	.	.	.	.	.
$32_4 = \chi_{15}$.	.	1	.	.	.	.	.	.	.	.	.	.	1	.
$32_5 = \chi_{16}$.	1	.	.	.	.	.	.	.	.	.	.	.	.	1
$32_6 = \chi_{17}$	1	1	.	.	.	.	.	.
$32_7 = \chi_{18}$	1	.	.	.	.	.	.	1	.	.	.

$\varphi_1 = 1_1$	$\varphi_9 = 17_1$
$\varphi_2 = 3_1$	$\varphi_{10} = 19_1$
$\varphi_3 = 5_1$	$\varphi_{11} = 21_1$
$\varphi_4 = 7_1$	$\varphi_{12} = 23_1$
$\varphi_5 = 9_1$	$\varphi_{13} = 25_1$
$\varphi_6 = 11_1$	$\varphi_{14} = 27_1$
$\varphi_7 = 13_1$	$\varphi_{15} = 29_1$
$\varphi_8 = 15_1$	

Block 3:	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}	φ_{28}	φ_{29}	φ_{30}	φ_{31}
$16_1 = \chi_{19}$	1	.	.	.	.	.	.	.
$16_2 = \chi_{20}$	1	.	.	.	.	.	.	.
$30_8 = \chi_{21}$	1
$30_9 = \chi_{22}$	1	.	.	.	.	1	.	.	.	.	.
$30_{10} = \chi_{23}$.	.	1	.	.	.	.	.	.	.	.	1	.	.	.
$30_{11} = \chi_{24}$	1	.	.	1	.	.	.	.	.	.
$30_{12} = \chi_{25}$	1	1	.	.	.	.	.	.	.
$30_{13} = \chi_{26}$.	1	.	.	.	.	.	.	.	.	.	.	1	.	.
$30_{14} = \chi_{27}$.	.	.	1	.	.	.	.	.	.	1	.	.	.	.
$30_{15} = \chi_{28}$	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.
$32_8 = \chi_{29}$.	.	1	.	.	.	.	.	.	.	.	.	1	.	.
$32_9 = \chi_{30}$	1	.	.	.	.	.	1	.	.	.	.
$32_{10} = \chi_{31}$.	1	.	.	.	.	.	.	.	.	.	.	.	1	.
$32_{11} = \chi_{32}$	1	.	.	.	1	.	.	.	.	.
$32_{12} = \chi_{33}$	1	.	1	.	.	.	.	.	.
$32_{13} = \chi_{34}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$32_{14} = \chi_{35}$.	.	.	1	.	.	.	.	.	.	.	1	.	.	.

$$\begin{aligned}
\varphi_{17} &= 2_1 \\
\varphi_{18} &= 4_1 \\
\varphi_{19} &= 6_1 \\
\varphi_{20} &= 8_1 \\
\varphi_{21} &= 10_1 \\
\varphi_{22} &= 12_1 \\
\varphi_{23} &= 14_1 \\
\varphi_{24} &= 16_1
\end{aligned}$$

$$\begin{aligned}
\varphi_{25} &= 18_1 \\
\varphi_{26} &= 20_1 \\
\varphi_{27} &= 22_1 \\
\varphi_{28} &= 24_1 \\
\varphi_{29} &= 26_1 \\
\varphi_{30} &= 28_1 \\
\varphi_{31} &= 30_1
\end{aligned}$$