# $L_3(4).6 \pmod 7$

| | blocks | defect | matrix |
|---|---|---|---|
| $G:$ | 1 | 1 | $7 \times 6$ |
| | 2 | 1 | $7 \times 6$ |
| | $3 = \overline{2}$ | 1 | $7 \times 6$ |
| | 4 | 0 | $105_1 = \chi_{3,0+}, \varphi_{3,0+}$ |
| | 5 | 0 | $105_2 = \chi_{3,1+}, \varphi_{3,1+}$ |
| | 6 | 0 | $126_1 = \chi_{8,0+}, \varphi_{7,0+}$ |
| | 7 | 0 | $126_2 = \chi_{8,1+}, \varphi_{7,1+}$ |
| | $8 = \overline{7}$ | 0 | $126_3 = \chi_{8,2+}, \varphi_{7,2+}$ |
| $3.G:$ | 9 | 1 | $5 \times 2$ |
| | $10 = 9*$ | | |
| | 11 | 0 | $21_1 = \chi_{35,0}, \varphi_{27,0}$ |
| | 12 | 0 | $21_2 = \chi_{35,1}, \varphi_{27,1}$ |
| | 13 | 0 | $21_3 = \chi_{35,2}, \varphi_{27,2}$ |
| | 14 | 0 | $21_4 = \chi_{35,3}, \varphi_{27,3}$ |
| | 15 | 0 | $21_5 = \chi_{35,4}, \varphi_{27,4}$ |
| | 16 | 0 | $21_6 = \chi_{35,5}, \varphi_{27,5}$ |
| | $17 = 11*$ | | |
| | $18 = 16*$ | | |
| | $19 = 15*$ | | |
| | $20 = 14*$ | | |

| | blocks | defect | matrix |
|---|---|---|---|
| | $21 = 13*$ | | |
| | $22 = 12*$ | | |
| | 23 | 0 | $126_4 = \chi_{38,0+}, \varphi_{28,0+}$ |
| | 24 | 0 | $126_5 = \chi_{38,1+}, \varphi_{28,1+}$ |
| | 25 | 0 | $126_6 = \chi_{38,2+}, \varphi_{28,2+}$ |
| | $26 = 23*$ | | |
| | $27 = 25*$ | | |
| | $28 = 24*$ | | |
| | 29 | 0 | $84_1 = \chi_{40,0}, \varphi_{30,0}$ |
| | 30 | 0 | $84_2 = \chi_{40,1}, \varphi_{30,1}$ |
| | 31 | 0 | $84_3 = \chi_{40,2}, \varphi_{30,2}$ |
| | 32 | 0 | $84_4 = \chi_{40,3}, \varphi_{30,3}$ |
| | 33 | 0 | $84_5 = \chi_{40,4}, \varphi_{30,4}$ |
| | 34 | 0 | $84_6 = \chi_{40,5}, \varphi_{30,5}$ |
| | $35 = 29*$ | | |
| | $36 = 34*$ | | |
| | $37 = 33*$ | | |
| | $38 = 32*$ | | |
| | $39 = 31*$ | | |
| | $40 = 30*$ | | |

| **Block 1:** | $\varphi_{1,0}$ | $\varphi_{1,3}$ | $\varphi_{2,0}$ | $\varphi_{2,3}$ | $\varphi_{6,0}$ | $\varphi_{6,3}$ |
|---|---|---|---|---|---|---|
| $1_1 = \chi_{1,0}$ | 1 | . | . | . | . | . |
| $1_4 = \chi_{1,3}$ | . | 1 | . | . | . | . |
| $20_1 = \chi_{2,0}$ | . | 1 | 1 | . | . | . |
| $20_4 = \chi_{2,3}$ | 1 | . | . | 1 | . | . |
| $90_1 = \chi_{6,0+}$ | . | . | . | . | 1 | 1 |
| $64_1 = \chi_{10,0}$ | . | . | 1 | . | 1 | . |
| $64_4 = \chi_{10,3}$ | . | . | . | 1 | . | 1 |

$\varphi_{1,0} = 1_1$
$\varphi_{1,3} = 1_4$
$\varphi_{2,0} = 19_1$
$\varphi_{2,3} = 19_4$
$\varphi_{6,0} = 45_1$
$\varphi_{6,3} = 45_4$

| **Block 2:** | $\varphi_{1,1}$ | $\varphi_{1,4}$ | $\varphi_{2,1}$ | $\varphi_{2,4}$ | $\varphi_{6,1}$ | $\varphi_{6,4}$ |
|---|---|---|---|---|---|---|
| $1_2 = \chi_{1,1}$ | 1 | . | . | . | . | . |
| $1_5 = \chi_{1,4}$ | . | 1 | . | . | . | . |
| $20_2 = \chi_{2,1}$ | . | 1 | 1 | . | . | . |
| $20_5 = \chi_{2,4}$ | 1 | . | . | 1 | . | . |
| $90_2 = \chi_{6,1+}$ | . | . | . | . | 1 | 1 |
| $64_2 = \chi_{10,1}$ | . | . | 1 | . | 1 | . |
| $64_5 = \chi_{10,4}$ | . | . | . | 1 | . | 1 |

$\varphi_{1,1} = 1_2$
$\varphi_{1,4} = 1_5$
$\varphi_{2,1} = 19_2$
$\varphi_{2,4} = 19_5$
$\varphi_{6,1} = 45_2$
$\varphi_{6,4} = 45_5$

| **Block 3:** | $\varphi_{1,2}$ | $\varphi_{1,5}$ | $\varphi_{2,2}$ | $\varphi_{2,5}$ | $\varphi_{6,2}$ | $\varphi_{6,5}$ |
|---|---|---|---|---|---|---|
| $1_3 = \chi_{1,2}$ | 1 | . | . | . | . | . |
| $1_6 = \chi_{1,5}$ | . | 1 | . | . | . | . |
| $20_3 = \chi_{2,2}$ | . | 1 | 1 | . | . | . |
| $20_6 = \chi_{2,5}$ | 1 | . | . | 1 | . | . |
| $90_3 = \chi_{6,2+}$ | . | . | . | . | 1 | 1 |
| $64_3 = \chi_{10,2}$ | . | . | 1 | . | 1 | . |
| $64_6 = \chi_{10,5}$ | . | . | . | 1 | . | 1 |

$\varphi_{1,2} = 1_3$
$\varphi_{1,5} = 1_6$
$\varphi_{2,2} = 19_3$
$\varphi_{2,5} = 19_6$
$\varphi_{6,2} = 45_3$
$\varphi_{6,5} = 45_6$

| **Blocks 9, 10:** | $\varphi_{24,0+}$ | $\varphi_{24,1+}$ |
|---|---|---|
| $45_1 = \chi_{32,0+}$ | 1 | . |
| $45_2 = \chi_{32,1+}$ | . | 1 |
| $90_4 = \chi_{36,0+}$ | 1 | 1 |
| $90_5 = \chi_{36,1+}$ | 1 | 1 |
| $90_6 = \chi_{36,2+}$ | 1 | 1 |

$\varphi_{24,0+} = 45_7$
$\varphi_{24,1+} = 45_8$