

# $L_3(8).3 \pmod{3}$

|       | blocks        | defect | matrix                               |
|-------|---------------|--------|--------------------------------------|
| $G :$ | 1             | 3      | $10 \times 2$                        |
|       | 2             | 1      | $3 \times 1$                         |
|       | 3             | 2      | $6 \times 2$                         |
|       | $4 = \bar{3}$ | 2      | $6 \times 2$                         |
|       | 5             | 0      | $1323_1 = \chi_{9+}, \varphi_{9+}$   |
|       | $6 = \bar{5}$ | 0      | $1323_2 = \chi_{10+}, \varphi_{10+}$ |
|       | 7             | 0      | $1323_3 = \chi_{15+}, \varphi_{15+}$ |
|       | $8 = \bar{7}$ | 0      | $1323_4 = \chi_{16+}, \varphi_{16+}$ |

|  | blocks          | defect | matrix                               |
|--|-----------------|--------|--------------------------------------|
|  | 9               | 0      | $1323_5 = \chi_{21+}, \varphi_{21+}$ |
|  | $10 = \bar{9}$  | 0      | $1323_6 = \chi_{22+}, \varphi_{22+}$ |
|  | 11              | 0      | $1323_7 = \chi_{27+}, \varphi_{27+}$ |
|  | $12 = \bar{11}$ | 0      | $1323_8 = \chi_{28+}, \varphi_{28+}$ |
|  | 13              | 1      | $3 \times 1$                         |
|  | $14 = \bar{13}$ | 1      | $3 \times 1$                         |
|  | 15              | 0      | $1971_1 = \chi_{70+}, \varphi_{42+}$ |

| Block 1:              | $\varphi_{1,0}$ | $\varphi_{33,0}$ |
|-----------------------|-----------------|------------------|
| $1_1 = \chi_{1,0}$    | 1               | .                |
| $1_2 = \chi_{1,1}$    | 1               | .                |
| $1_3 = \chi_{1,2}$    | 1               | .                |
| $511_1 = \chi_{33,0}$ | .               | 1                |
| $511_2 = \chi_{33,1}$ | .               | 1                |
| $511_3 = \chi_{33,2}$ | .               | 1                |
| $1533_1 = \chi_{34+}$ | .               | 3                |
| $512_1 = \chi_{61,0}$ | 1               | 1                |
| $512_2 = \chi_{61,1}$ | 1               | 1                |
| $512_3 = \chi_{61,2}$ | 1               | 1                |

$$\begin{aligned} \varphi_{1,0} &= 1_1 \\ \varphi_{33,0} &= 511_1 \end{aligned}$$

| Block 2:            | $\varphi_{2,0}$ |
|---------------------|-----------------|
| $72_1 = \chi_{2,0}$ | 1               |
| $72_2 = \chi_{2,1}$ | 1               |
| $72_3 = \chi_{2,2}$ | 1               |

$$\varphi_{2,0} = 72_1$$

| Block 3:              | $\varphi_{3+}$ | $\varphi_{34+}$ |
|-----------------------|----------------|-----------------|
| $219_1 = \chi_{3+}$   | 1              | .               |
| $1533_2 = \chi_{37+}$ | .              | 1               |
| $1533_4 = \chi_{43+}$ | .              | 1               |
| $1533_6 = \chi_{49+}$ | .              | 1               |
| $1533_8 = \chi_{55+}$ | .              | 1               |
| $1752_1 = \chi_{62+}$ | 1              | 1               |

$$\begin{aligned} \varphi_{3+} &= 219_1 \\ \varphi_{34+} &= 1533_1 \end{aligned}$$

| Block 4:              | $\varphi_{4+}$ | $\varphi_{35+}$ |                          |
|-----------------------|----------------|-----------------|--------------------------|
| $219_2 = \chi_{4+}$   | 1              | .               |                          |
| $1533_3 = \chi_{38+}$ | .              | 1               | $\varphi_{4+} = 219_2$   |
| $1533_5 = \chi_{44+}$ | .              | 1               | $\varphi_{35+} = 1533_2$ |
| $1533_7 = \chi_{50+}$ | .              | 1               |                          |
| $1533_9 = \chi_{56+}$ | .              | 1               |                          |
| $1752_2 = \chi_{63+}$ | 1              | 1               |                          |

| Block 13:             | $\varphi_{40,0}$ |                          |
|-----------------------|------------------|--------------------------|
| $657_1 = \chi_{68,0}$ | 1                | $\varphi_{40,0} = 657_1$ |
| $657_2 = \chi_{68,1}$ | 1                |                          |
| $657_3 = \chi_{68,2}$ | 1                |                          |

| Block 14:             | $\varphi_{41,0}$ |                          |
|-----------------------|------------------|--------------------------|
| $657_4 = \chi_{69,0}$ | 1                | $\varphi_{41,0} = 657_2$ |
| $657_5 = \chi_{69,1}$ | 1                |                          |
| $657_6 = \chi_{69,2}$ | 1                |                          |