

$$L_2(19) \pmod{19}$$

|         | blocks                                         | defect                                         | matrix                                                                             |
|---------|------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------|
| $G :$   | $\begin{smallmatrix} 1 \\ 2 \end{smallmatrix}$ | $\begin{smallmatrix} 1 \\ 0 \end{smallmatrix}$ | $\begin{smallmatrix} 11 \times 9 \\ 19_1 = \chi_8, \varphi_{10} \end{smallmatrix}$ |
| $2.G :$ | $3$                                            | $1$                                            | $11 \times 9$                                                                      |

| Block 1:           | $\varphi_1$ | $\varphi_2$ | $\varphi_3$ | $\varphi_4$ | $\varphi_5$ | $\varphi_6$ | $\varphi_7$ | $\varphi_8$ | $\varphi_9$ |             |   |        |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---|--------|
| $1_1 = \chi_1$     | 1           | .           | .           | .           | .           | .           | .           | .           | .           | $\varphi_1$ | = | $1_1$  |
| $9_1 = \chi_2$     | .           | .           | .           | .           | 1           | .           | .           | .           | .           | $\varphi_2$ | = | $3_1$  |
| $9_2 = \chi_3$     | .           | .           | .           | .           | 1           | .           | .           | .           | .           | $\varphi_3$ | = | $5_1$  |
| $18_1 = \chi_4$    | .           | .           | .           | 1           | .           | 1           | .           | .           | .           | $\varphi_4$ | = | $7_1$  |
| $18_2 = \chi_5$    | .           | 1           | .           | .           | .           | .           | .           | 1           | .           | $\varphi_5$ | = | $9_1$  |
| $18_3 = \chi_6$    | 1           | .           | .           | .           | .           | .           | .           | .           | 1           | $\varphi_6$ | = | $11_1$ |
| $18_4 = \chi_7$    | .           | .           | 1           | .           | .           | .           | 1           | .           | .           | $\varphi_7$ | = | $13_1$ |
| $20_1 = \chi_9$    | .           | .           | .           | 1           | .           | .           | 1           | .           | .           | $\varphi_8$ | = | $15_1$ |
| $20_2 = \chi_{10}$ | .           | .           | 1           | .           | .           | .           | .           | 1           | .           | $\varphi_9$ | = | $17_1$ |
| $20_3 = \chi_{11}$ | .           | 1           | .           | .           | .           | .           | .           | .           | 1           |             |   |        |
| $20_4 = \chi_{12}$ | .           | .           | .           | .           | 1           | 1           | .           | .           | .           |             |   |        |

[illegible]