

# Character Tables of Multiplicity-Free Endomorphism Rings

$G = J_2.2$  (no. 10)

$H = 2^{2+4}.(S_3 \times 3) < 2^{2+4}.(S_3 \times S_3)$

rank: 9

degree: 1050

|          | $O_1$ | $O_2$ | $O_3$ | $O_4$ | $O_5$ | $O_6$ | $O_7$ | $O_8$ | $O_9$ |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| $1a^+$   | 1     | 1     | 24    | 32    | 32    | 192   | 192   | 192   | 384   |
| $36a^+$  | 1     | 1     | 14    | -8    | -8    | 32    | 12    | 12    | -56   |
| $63a^+$  | 1     | 1     | -6    | 12    | 12    | 12    | 2     | 2     | -36   |
| $70ab$   | 1     | -1    | 0     | -8    | 8     | 0     | -12   | 12    | 0     |
| $90a^+$  | 1     | 1     | 10    | 4     | 4     | -4    | -18   | -18   | 20    |
| $160a^+$ | 1     | 1     | 0     | -1    | -1    | -24   | 12    | 12    | 0     |
| $160a^-$ | 1     | -1    | 0     | 7     | -7    | 0     | -12   | 12    | 0     |
| $175a^+$ | 1     | 1     | -6    | -4    | -4    | 12    | -6    | -6    | 12    |
| $225a^+$ | 1     | -1    | 0     | 0     | 0     | 0     | 16    | -16   | 0     |

## References

- [Höh01] I. Höhler. Vielfachheitsfreie Permutationsdarstellungen und die Invarianten zugehöriger Graphen. Examensarbeit, RWTH Aachen, 2001.