

Character Tables of Multiplicity-Free Endomorphism Rings

$G = 3.M_{22}.2$ (no. 5)

$H = L_2(11).2 \rightarrow (M_{22}.2, 16)$

rank: 11

degree: 2016

	O_1	O_2	O_3	O_4	O_5	O_6	O_7	O_8	O_9
$1a^+$	1	2	55	66	110	132	165	165	330
$21a^-$	1	2	-25	-6	-50	-12	45	45	90
$55a^+$	1	2	13	-18	26	-36	-3	39	-6
$154a^+$	1	2	7	6	14	12	9	-15	18
$210a^-$	1	2	-3	-6	-6	-12	1	-21	2
$231a^-$	1	2	-3	6	-6	12	-11	15	-22
$21bc$	1	-1	20	-24	-20	24	45	0	-45
$105ad$	1	-1	-2+2r33	9+r33	2-2r33	-9-r33	12-r33	0	-12+r33
$105bc$	1	-1	-2-2r33	9-r33	2+2r33	-9+r33	12+r33	0	-12-r33
$210bc$	1	-1	0	0	0	0	-11	0	11
$231bc$	1	-1	0	-6	0	6	-5	0	5

	O_{10}	O_{11}
$1a^+$	330	660
$21a^-$	-30	-60
$55a^+$	-6	-12
$154a^+$	-18	-36
$210a^-$	14	28
$231a^-$	2	4
$21bc$	-30	30
$105ad$	3+r33	-3-r33
$105bc$	3-r33	-3+r33
$210bc$	-22	22
$231bc$	20	-20

$r33 = Sqrt(33)$

References

- [Mül08] J. Müller. On the multiplicity-free actions of the sporadic simple groups. *J. Algebra*, 320:910–926, 2008.