

Character Tables of Multiplicity-Free Endomorphism Rings

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

$H = O_8^+(2) : 2 \times 2 \rightarrow (Fi_{22}.2, 8)$

rank: 12

degree: 555984

	O_1	O_2	O_3	O_4	O_5	O_6	O_7	O_8	O_9	O_{10}
$1a^+$	1	2	2	4	1575	3150	3150	6300	67200	113400
$429a^+$	1	2	-1	-2	315	630	-315	-630	6720	0
$3080a^+$	1	2	2	4	171	342	342	684	-192	-324
$13650a^+$	1	2	2	4	-9	-18	-18	-36	672	-648
$45045a^+$	1	2	2	4	-9	-18	-18	-36	-192	216
$48048a^+$	1	2	-1	-2	-45	-90	45	90	240	0
$75075a^+$	1	2	-1	-2	27	54	-27	-54	-192	0
$351ab$	1	-1	2	-2	375	-375	750	-750	0	5400
$19305ab$	1	-1	2	-2	39	-39	78	-78	0	-648
$27027ab$	1	-1	-1	1	75	-75	-75	75	0	0
$42120ab$	1	-1	2	-2	-21	21	-42	42	0	252
$96525ab$	1	-1	-1	1	-21	21	21	-21	0	0

	O_{11}	O_{12}
$1a^+$	134400	226800
$429a^+$	-6720	0
$3080a^+$	-384	-648
$13650a^+$	1344	-1296
$45045a^+$	-384	432
$48048a^+$	-240	0
$75075a^+$	192	0
$351ab$	0	-5400
$19305ab$	0	648
$27027ab$	0	0
$42120ab$	0	-252
$96525ab$	0	0

References

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