

Character Tables of Multiplicity-Free Endomorphism Rings

$G = 6.Suz$ (no. 1)

$H = U_5(2) \rightarrow (2.Suz, 1), (3.Suz, 2)$

rank: 26

degree: 196560

	O_1	O_2	O_3	O_4	O_5	O_6	O_7	O_8
$1a$	1	1	1	1	1	1	891	891
$143a$	1	1	1	1	1	1	243	243
$364a$	1	1	1	1	1	1	-99	-99
$5940a$	1	1	1	1	1	1	33	33
$12012a$	1	1	1	1	1	1	-27	-27
$14300a$	1	1	1	1	1	1	9	9
$364b$	1	-1	1	-1	1	-1	$99+198z3^{**}$	$99+198z3$
$364c$	1	-1	1	-1	1	-1	$99+198z3$	$99+198z3^{**}$
$16016a$	1	-1	1	-1	1	-1	$9+18z3^{**}$	$9+18z3$
$16016b$	1	-1	1	-1	1	-1	$9+18z3$	$9+18z3^{**}$
$78a$	1	$z3$	$z3^{**}$	1	$z3$	$z3^{**}$	$-297z3$	$-297z3$
$78b$	1	$z3^{**}$	$z3$	1	$z3^{**}$	$z3$	$-297z3^{**}$	$-297z3^{**}$
$1365a$	1	$z3$	$z3^{**}$	1	$z3$	$z3^{**}$	$99z3$	$99z3$
$1365b$	1	$z3^{**}$	$z3$	1	$z3^{**}$	$z3$	$99z3^{**}$	$99z3^{**}$
$4290a$	1	$z3$	$z3^{**}$	1	$z3$	$z3^{**}$	$-45z3$	$-45z3$
$4290b$	1	$z3^{**}$	$z3$	1	$z3^{**}$	$z3$	$-45z3^{**}$	$-45z3^{**}$
$27027a$	1	$z3$	$z3^{**}$	1	$z3$	$z3^{**}$	$3z3$	$3z3$
$27027b$	1	$z3^{**}$	$z3$	1	$z3^{**}$	$z3$	$3z3^{**}$	$3z3^{**}$
$12a$	1	$-z3$	$z3^{**}$	-1	$z3$	$-z3^{**}$	$594+297z3$	$-297+297z3^{**}$
$12b$	1	$-z3^{**}$	$z3$	-1	$z3^{**}$	$-z3$	$594+297z3^{**}$	$-297+297z3$
$924a$	1	$-z3$	$z3^{**}$	-1	$z3$	$-z3^{**}$	$126+63z3$	$-63+63z3^{**}$
$924b$	1	$-z3^{**}$	$z3$	-1	$z3^{**}$	$-z3$	$126+63z3^{**}$	$-63+63z3$
$4368a$	1	$-z3$	$z3^{**}$	-1	$z3$	$-z3^{**}$	$-33+33z3$	$66+33z3$
$4368b$	1	$-z3^{**}$	$z3$	-1	$z3^{**}$	$-z3$	$-33+33z3$	$66+33z3^{**}$
$27456a$	1	$-z3$	$z3^{**}$	-1	$z3$	$-z3^{**}$	$6+3z3$	$-3+3z3^{**}$
$27456b$	1	$-z3^{**}$	$z3$	-1	$z3^{**}$	$-z3$	$6+3z3^{**}$	$-3+3z3$

	O_9	O_{10}	O_{11}	O_{12}	O_{13}
$1a$	891	891	891	891	2816
$143a$	243	243	243	243	512
$364a$	-99	-99	-99	-99	176
$5940a$	33	33	33	33	8
$12012a$	-27	-27	-27	-27	32
$14300a$	9	9	9	9	-40
$364b$	$99+198z3^{**}$	$99+198z3$	$99+198z3$	$99+198z3^{**}$	-352
$364c$	$99+198z3$	$99+198z3^{**}$	$99+198z3^{**}$	$99+198z3$	-352
$16016a$	$9+18z3^{**}$	$9+18z3$	$9+18z3$	$9+18z3^{**}$	8
$16016b$	$9+18z3$	$9+18z3^{**}$	$9+18z3^{**}$	$9+18z3$	8
$78a$	-297	-297	$-297z3^{**}$	$-297z3^{**}$	704
$78b$	-297	-297	$-297z3$	$-297z3$	704
$1365a$	99	99	$99z3^{**}$	$99z3^{**}$	176
$1365b$	99	99	$99z3$	$99z3$	176
$4290a$	-45	-45	$-45z3^{**}$	$-45z3^{**}$	32
$4290b$	-45	-45	$-45z3$	$-45z3$	32
$27027a$	3	3	$3z3^{**}$	$3z3^{**}$	-16
$27027b$	3	3	$3z3$	$3z3$	-16
$12a$	$297+594z3^{**}$	$297+594z3$	$594+297z3^{**}$	$-297+297z3$	-1408
$12b$	$297+594z3$	$297+594z3^{**}$	$594+297z3$	$-297+297z3^{**}$	-1408
$924a$	$63+126z3^{**}$	$63+126z3$	$126+63z3^{**}$	$-63+63z3$	-160
$924b$	$63+126z3$	$63+126z3^{**}$	$126+63z3$	$-63+63z3^{**}$	-160
$4368a$	$33+66z3$	$33+66z3^{**}$	$-33+33z3$	$66+33z3^{**}$	-88
$4368b$	$33+66z3^{**}$	$33+66z3$	$-33+33z3^{**}$	$66+33z3$	-88
$27456a$	$3+6z3^{**}$	$3+6z3$	$6+3z3^{**}$	$-3+3z3$	20
$27456b$	$3+6z3$	$3+6z3^{**}$	$6+3z3$	$-3+3z3^{**}$	20

	O_{14}	O_{15}	O_{16}	O_{17}	O_{18}	O_{19}
$1a$	2816	2816	2816	2816	2816	11880
$143a$	512	512	512	512	512	-1080
$364a$	176	176	176	176	176	1980
$5940a$	8	8	8	8	8	180
$12012a$	32	32	32	32	32	-180
$14300a$	-40	-40	-40	-40	-40	36
$364b$	-352	352	352	-352	352	0
$364c$	-352	352	352	-352	352	0
$16016a$	8	-8	-8	8	-8	0
$16016b$	8	-8	-8	8	-8	0
$78a$	704z3**	704	704z3**	704z3	704z3	0
$78b$	704z3	704	704z3	704z3**	704z3**	0
$1365a$	176z3**	176	176z3**	176z3	176z3	0
$1365b$	176z3	176	176z3	176z3**	176z3**	0
$4290a$	32z3**	32	32z3**	32z3	32z3	0
$4290b$	32z3	32	32z3	32z3**	32z3**	0
$27027a$	-16z3**	-16	-16z3**	-16z3	-16z3	0
$27027b$	-16z3	-16	-16z3	-16z3**	-16z3**	0
$12a$	-1408z3**	1408	1408z3**	-1408z3	1408z3	0
$12b$	-1408z3	1408	1408z3	-1408z3**	1408z3**	0
$924a$	-160z3**	160	160z3**	-160z3	160z3	0
$924b$	-160z3	160	160z3	-160z3**	160z3**	0
$4368a$	-88z3**	88	88z3**	-88z3	88z3	0
$4368b$	-88z3	88	88z3	-88z3**	88z3**	0
$27456a$	20z3**	-20	-20z3**	20z3	-20z3	0
$27456b$	20z3	-20	-20z3	20z3**	-20z3**	0

	O_{20}	O_{21}	O_{22}	O_{23}
$1a$	20736	20736	20736	20736
$143a$	0	0	0	0
$364a$	-144	-144	-144	-144
$5940a$	-168	-168	-168	-168
$12012a$	0	0	0	0
$14300a$	72	72	72	72
$364b$	$288+576z3^{**}$	$288+576z3^{**}$	$288+576z3$	$288+576z3$
$364c$	$288+576z3$	$288+576z3$	$288+576z3^{**}$	$288+576z3^{**}$
$16016a$	$72+144z3$	$72+144z3$	$72+144z3^{**}$	$72+144z3^{**}$
$16016b$	$72+144z3^{**}$	$72+144z3^{**}$	$72+144z3$	$72+144z3$
$78a$	$-1728z3^{**}$	$-1728z3$	$-1728z3$	$-1728z3^{**}$
$78b$	$-1728z3$	$-1728z3^{**}$	$-1728z3^{**}$	$-1728z3$
$1365a$	$144z3^{**}$	$144z3$	$144z3$	$144z3^{**}$
$1365b$	$144z3$	$144z3^{**}$	$144z3^{**}$	$144z3$
$4290a$	$288z3^{**}$	$288z3$	$288z3$	$288z3^{**}$
$4290b$	$288z3$	$288z3^{**}$	$288z3^{**}$	$288z3$
$27027a$	$-48z3^{**}$	$-48z3$	$-48z3$	$-48z3^{**}$
$27027b$	$-48z3$	$-48z3^{**}$	$-48z3^{**}$	$-48z3$
$12a$	$-3456+3456z3$	$6912+3456z3$	$-3456+3456z3^{**}$	$6912+3456z3^{**}$
$12b$	$-3456+3456z3^{**}$	$6912+3456z3^{**}$	$-3456+3456z3$	$6912+3456z3$
$924a$	$576+288z3^{**}$	$-288+288z3^{**}$	$576+288z3$	$-288+288z3$
$924b$	$576+288z3$	$-288+288z3$	$576+288z3^{**}$	$-288+288z3^{**}$
$4368a$	$48+24z3^{**}$	$-24+24z3^{**}$	$48+24z3$	$-24+24z3$
$4368b$	$48+24z3$	$-24+24z3$	$48+24z3^{**}$	$-24+24z3^{**}$
$27456a$	$-12+12z3$	$24+12z3$	$-12+12z3^{**}$	$24+12z3^{**}$
$27456b$	$-12+12z3^{**}$	$24+12z3^{**}$	$-12+12z3$	$24+12z3$

	O_{24}	O_{25}	O_{26}
$1a$	20736	20736	38016
$143a$	0	0	-3456
$364a$	-144	-144	-1584
$5940a$	-168	-168	576
$12012a$	0	0	144
$14300a$	72	72	-288
$364b$	$288+576z_3$	$288+576z_3^{**}$	0
$364c$	$288+576z_3^{**}$	$288+576z_3$	0
$16016a$	$72+144z_3^{**}$	$72+144z_3$	0
$16016b$	$72+144z_3$	$72+144z_3^{**}$	0
$78a$	-1728	-1728	0
$78b$	-1728	-1728	0
$1365a$	144	144	0
$1365b$	144	144	0
$4290a$	288	288	0
$4290b$	288	288	0
$27027a$	-48	-48	0
$27027b$	-48	-48	0
$12a$	$3456+6912z_3$	$3456+6912z_3^{**}$	0
$12b$	$3456+6912z_3^{**}$	$3456+6912z_3$	0
$924a$	$288+576z_3^{**}$	$288+576z_3$	0
$924b$	$288+576z_3$	$288+576z_3^{**}$	0
$4368a$	$24+48z_3^{**}$	$24+48z_3$	0
$4368b$	$24+48z_3$	$24+48z_3^{**}$	0
$27456a$	$12+24z_3$	$12+24z_3^{**}$	0
$27456b$	$12+24z_3^{**}$	$12+24z_3$	0

$$z_3 = (-1 + \sqrt{-3})/2$$

$$z_3^{**} = (-1 - \sqrt{-3})/2$$

References

[Lin] S. A. Linton. private communication.