

## THE SUBGROUP LATTICE OF $L_2(25) \cdot 2$

THOMAS CONNOR AND DIMITRI LEEMANS

Nr.	Structure	Order	Length	Maximal Subgroups	Minimal Overgroups
1	$L_2(25) \cdot 2$	15600	1	2, 3 (26), 11 (300), 13 (325)	
2	$L_2(25)$	7800	1	4 (26), 7 (130), 14 (300), 16 (325)	1
3	$5^2 : 2 \cdot 2 \cdot S_3$	600	26	4, 5 (3), 17 (25)	1
4	$5^2 : 3 : 2 \cdot 2$	300	26	6, 8, 23 (25)	2, 3
5	$5^2 : 2 \cdot 2 \cdot 2$	200	78	8, 28 (25)	3
6	$5^2 : 3 : 2$	150	26	9, 12, 31 (25)	4
7	$A_5 : 2$	120	130	10, 18 (5), 20 (6), 24 (10)	2
8	$5^2 : 2 \cdot 2$	100	26	12, 20 (30)	4, 5 (3)
9	$5^2 : 3$	75	26	15, 37 (25)	6
10	$A_5$	60	130	25 (5), 27 (6), 32 (10)	7
11	$D_{26} \cdot 2$	52	300	14, 34 (13)	1
12	$5^2 : 2$	50	26	15, 27 (30)	6, 8
13	$Q_8 : S_3$	48	325	19, 17, 16, 21 (3)	1
14	$D_{26}$	26	300	22, 38 (13)	2, 11
15	$5^2$	25	26	33 (6)	9, 12
16	$D_{24}$	24	325	24 (2), 23, 29 (3)	2, 13
17	$4 \cdot S_3$	24	325	23, 28 (3)	3 (2), 13
18	$2^2 : S_3$	24	650	25, 29 (3), 32 (4)	7
19	$Q_8 \times 3$	24	325	26 (2), 23, 30	13
20	$D_{10} \cdot 2$	20	780	27, 35 (5)	7, 8
21	$D_8 \cdot 2$	16	975	29, 30, 28	13
22	13	13	300	39	14
23	12	12	325	31, 35	4 (2), 16, 17, 19
24	$D_{12}$	12	650	32 (2), 31, 36 (3)	7 (2), 16
25	$A_4$	12	650	36, 37 (4)	10, 18
26	12	12	650	31, 34	19
27	$D_{10}$	10	780	33, 38 (5)	10, 12, 20
28	8	8	975	35	5 (2), 17, 21
29	$D_8$	8	975	36 (2), 35	16, 18 (2), 21
30	$Q_8$	8	325	34 (2), 35	19, 21 (3)
31	6	6	325	37, 38	6 (2), 23, 24 (2), 26 (2)

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Nr.	Structure	Order	Length	Maximal Subgroups	Minimal Overgroups
32	$S_3$	6	1300	37, 38 (3)	10, 18 (2), 24
33	5	5	156	39	15, 27 (5)
34	4	4	650	38	11 (6), 26, 30
35	4	4	325	38	20 (12), 23, 28 (3), 29 (3), 30
36	$2^2$	4	650	38 (3)	24 (3), 25, 29 (3)
37	3	3	325	39	9 (2), 25 (8), 31, 32 (4)
38	2	2	325	39	14 (12), 27 (12), 31, 32 (12), 34 (2), 35, 36 (6)
39	1	1	1		22 (300), 33 (156), 37 (325), 38 (325)

TABLE 1. Subgroup lattice of  $L_2(25) \cdot 2$ 

UNIVERSITÉ LIBRE DE BRUXELLES, DÉPARTEMENT DE MATHÉMATIQUES - C.P.216, BOULEVARD DU TRIOMPHE,  
B-1050 BRUXELLES, BOURSIER FR1A  
*E-mail address:* [tconnor@ulb.ac.be](mailto:tconnor@ulb.ac.be)

UNIVERSITY OF AUCKLAND, DEPARTMENT OF MATHEMATICS, PRIVATE BAG 92019, AUCKLAND, NEW ZEALAND  
*E-mail address:* [d.leemans@auckland.ac.nz](mailto:d.leemans@auckland.ac.nz)