${\bf Dihedral Comparison Magma}$

September 10, 2018

Group: **Dih**(10000)

Searching up to index: 125

How many normal groups are found : 14

Total Time in s: 103.3

Function	Count_GAP	Count_MAGMA	$Time_GAP$	Time_MAGMA
LowIndexNormal	1	1	103.3	1
FindPQuotients	12	12	103.3	0.7
FindTQuotients	1	1	0.0	0.3
FindIntersections	11	11	0.0	0
$\operatorname{AddGroup}$	16	15	0.0	0.1
MustCheckP	118	41	0.0	0
FindPModules	99	22	103.3	0.7
SMTX_BasesMaximalSubmodules	11	11	0.0	0
PullBackH	13	5	0.0	0

Group: Dih(10000)

Searching up to index : 250

How many normal groups are found : 17

Total Time in s: 138.7

Function	$Count_GAP$	$\operatorname{Count}_{-}\operatorname{MAGMA}$	$Time_GAP$	$\operatorname{Time_MAGMA}$
LowIndexNormal	1	1	815.8	1.8
FindPQuotients	14	14	815.6	1.3
FindTQuotients	1	1	0.2	0.5

FindIntersections	13	13	0.0	0
AddGroup	21	20	0.0	0.3
MustCheckP	205	53	0.0	0
FindPModules	172	27	815.6	1.3
SMTX_BasesMaximalSubmodules	18	18	0.0	0
PullBackH	20	5	0.0	0

Function	$Count_GAP$	$\operatorname{Count}_{-}\operatorname{MAGMA}$	$Time_GAP$	$\operatorname{Time_MAGMA}$
LowIndexNormal	1	1	138.7	1.8
FindPQuotients	14	14	138.7	1.3
FindTQuotients	1	1	0.0	0.5
FindIntersections	13	13	0.0	0
AddGroup	21	20	0.0	0.3
MustCheckP	205	53	0.0	0
FindPModules	172	27	138.7	1.3
$SMTX_BasesMaximalSubmodules$	18	18	0.0	0
PullBackH	20	5	0.0	0

Group: **Dih**(10000)

Searching up to index : 500

How many normal groups are found : 19

Total Time in s: 160.4

Function	$Count_GAP$	$\operatorname{Count}_{-}\operatorname{MAGMA}$	$\operatorname{Time_GAP}$	$Time_MAGMA$
LowIndexNormal	1	1	160.4	2.9
FindPQuotients	17	17	160.4	1.8
FindTQuotients	1	1	0.0	1
FindIntersections	16	16	0.0	0
AddGroup	27	23	0.0	0.6
MustCheckP	362	71	0.0	0
FindPModules	299	32	160.4	1.8
SMTX_BasesMaximalSubmodules	21	21	0.0	0
PullBackH	23	5	0.0	0

Group: Dih(10000)

Searching up to index: 1000

How many normal groups are found : 21

Total Time in s: 172.4

Function	$Count_GAP$	Count_MAGMA	$Time_GAP$	${ m Time_MAGMA}$
LowIndexNormal	1	1	172.4	5.3
FindPQuotients	19	19	172.4	2.8
FindTQuotients	1	1	0.0	2.4
FindIntersections	18	18	0.0	0
AddGroup	33	26	0.0	1.4
MustCheckP	641	77	0.0	0
FindPModules	522	32	172.3	2.8
SMTX_BasesMaximalSubmodules	24	24	0.0	0
PullBackH	26	5	0.0	0

Group: **Dih**(10000)

Searching up to index : 2000

How many normal groups are found : 23

Total Time in s: 199.5

Function	$Count_GAP$	$Count_MAGMA$	$Time_GAP$	$\mathrm{Time_MAGMA}$
LowIndexNormal	1	1	199.5	8.19999999999999
FindPQuotients	21	21	199.5	4.7
FindTQuotients	1	1	0.0	3.5
FindIntersections	20	20	0.0	0
AddGroup	35	28	0.0	3
MustCheckP	1138	82	0.0	0
FindPModules	916	33	199.4	4.7
SMTX_BasesMaximalSubmodules	26	26	0.0	0
PullBackH	28	5	0.0	0

Group: Dih(10000)

Searching up to index : 4000

How many normal groups are found : 25

Total Time in s : 223.5

Function	$Count_GAP$	$Count_MAGMA$	$Time_GAP$	${ m Time_MAGMA}$
LowIndexNormal	1	1	223.5	14.7
FindPQuotients	23	23	223.5	10
FindTQuotients	1	1	0.0	4.7
FindIntersections	22	22	0.0	0
AddGroup	40	30	0.1	7.9
MustCheckP	2042	88	0.0	0
FindPModules	1635	34	223.5	10
SMTX_BasesMaximalSubmodules	28	28	0.0	0
PullBackH	30	5	0.0	0