${\bf Dihedral Comparison Magma}$

September 10, 2018

Group: **Dih**(10000)

Searching up to index: 125

How many normal groups are found : 14

Total Time in s: 182.9

Function	$Count_GAP$	$Count_MAGMA$	$\operatorname{Time_GAP}$	$Time_MAGMA$
LowIndexNormal	1	1	182.9	1
FindPQuotients	12	12	159.8	0.7
FindTQuotients	1	1	0.0	0.3
FindIntersections	11	11	23.0	0
AddGroup	16	15	137.0	0.1
MustCheckP	118	41	0.0	0
FindPModules	99	22	159.8	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: 240.6

Function	$Count_GAP$	$\operatorname{Count}_{-}\operatorname{MAGMA}$	$Time_GAP$	$\operatorname{Time_MAGMA}$
LowIndexNormal	1	1	240.6	1.8
FindPQuotients	14	14	240.6	1.3
FindTQuotients	1	1	0.0	0.5

FindIntersections	13	13	0.0	0
AddGroup	21	20	194.4	0.3
MustCheckP	205	53	0.0	0
FindPModules	172	27	240.6	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: 309.0

Function	$Count_GAP$	$Count_MAGMA$	$Time_GAP$	Time_MAGMA
LowIndexNormal	1	1	309.0	2.9
FindPQuotients	17	17	274.7	1.8
FindTQuotients	1	1	34.2	1
FindIntersections	16	16	0.0	0
AddGroup	27	23	296.4	0.6
MustCheckP	362	71	0.0	0
FindPModules	299	32	274.7	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: 377.5

Function	$Count_GAP$	$Count_MAGMA$	$\mathrm{Time}_{-}\mathrm{GAP}$	$\text{Time_MAGMA} \parallel$
LowIndexNormal	1	1	377.5	5.3
FindPQuotients	19	19	297.9	2.8
FindTQuotients	1	1	79.6	2.4
FindIntersections	18	18	0.0	0

AddGroup	33	26	364.2	1.4
MustCheckP	641	77	0.0	0
FindPModules	522	32	297.8	2.8
${\bf SMTX_BasesMaximalSubmodules}$	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: 409.6

Function	$Count_GAP$	$\operatorname{Count}_{-}\operatorname{MAGMA}$	$\mathrm{Time}_{-}\mathrm{GAP}$	$\mathrm{Time_MAGMA}$
LowIndexNormal	1	1	409.6	8.199999999999999
FindPQuotients	21	21	327.8	4.7
FindTQuotients	1	1	81.7	3.5
FindIntersections	20	20	0.0	0
AddGroup	35	28	393.6	3
MustCheckP	1138	82	0.0	0
FindPModules	916	33	327.8	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: 462.9

Function	$\operatorname{Count}_{\operatorname{-}\!GAP}$	$\operatorname{Count}_{-}\operatorname{MAGMA}$	$\mathrm{Time}_{-}\mathrm{GAP}$	$\operatorname{Time_MAGMA}$
${ m LowIndexNormal}$	1	1	462.9	14.7
FindPQuotients	23	23	348.7	10
FindTQuotients	1	1	114.1	4.7
FindIntersections	22	22	0.0	0
AddGroup	40	30	445.4	7.9

${ m MustCheckP}$	2042	88	0.0	0
FindPModules	1635	34	348.6	10
SMTX_BasesMaximalSubmodules	28	28	0.0	0
PullBackH	30	5	0.0	0