

Year: 2010

Vol.: 77

Fasc.: 1-2

Title: On weakly SS -permutable subgroups of a finite group

Author(s): Xuanli He, Yangming Li and Yanming Wang

Suppose that G is a finite group and H is a subgroup of G . We say that H is SS -permutable in G if there is a supplement B of H to G such that H permutes with every Sylow subgroup of B ; H is weakly SS -permutable in G if there exist a subnormal subgroup T of G and an SS -permutable subgroup H_{ss} of G contained in H such that $G = HT$ and $H \cap T \leq H_{ss}$. We investigate the influence of weakly SS -permutable subgroups on the structure of finite groups. Some recent results are generalized and unified.

Address:

Xuanli He
Department of Mathematics
Guangxi University
Nanning, 530004
China
E-mail: xuanlihe@163.com

Address:

Yangming Li
Department of Mathematics
Guangdong Institute of Education
Guangzhou, 510310
China

Address:

Yanming Wang
Lingnan Coll. and Dept. of Math.
Sun Yat-sen University
Zhongshan, 510275
China