The influence of S-quasinormal subgroups on the structure of finite groups

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Abstract

A subgroup H of group G is called S-quasinormal in G if it permutes with every Sylow subgroup of G. In this thesis, we investigate the influence of S-quasinormal subgroups of finite groups on the structure of such groups and we obtain new results in this regard. Moreover, we provide several examples to clarify our findings.

Keywords: Finite group, *S*-quasinormal subgroup, Sylow subgroup, supersolvable group.