

**ON INTERSECTIONS OF ABELIAN AND NILPOTENT SUBGROUPS IN
FINITE GROUPS****V. I. Zenkov**

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Let A be an abelian subgroup of a finite group G , and let B be a nilpotent subgroup of G . If G is solvable, then we prove that it contains an element g such that $A \cap B^g \leq F(G)$, where $F(G)$ is the Fitting subgroup of G . If G is not solvable, we prove that a counterexample of smallest order to the conjecture that $A \cap B^g \leq F(G)$ for some element g of G is an almost simple group.

Keywords: finite group, abelian subgroup, nilpotent subgroup, intersection of subgroups, Fitting subgroup.

V. I. Zenkov Dr. Phys.-Math. Sci., Prof., Krasovskii Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences, Yekaterinburg, 620990 Russia; Ural Federal University, Yekaterinburg, 620002 Russia, e-mail: vli9z52@mail.ru.

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