FINITE ALMOST SIMPLE GROUPS WITH PRIME GRAPHS ALL OF WHOSE CONNECTED COMPONENTS ARE CLIQUES

M. R. Zinov'eva, A. S. Kondrat'ev

We find finite almost simple groups with prime graphs all of whose connected components are cliques, i.e., complete graphs. The proof is based on the following fact, which was obtained by the authors and is of independent interest: the prime graph of a finite simple nonabelian group contains two nonadjacent odd vertices that do not divide the order of the outer automorphism group of this group.

Keywords: finite group, almost simple group, prime graph.

M. R. Zinov'eva Cand. Phys.-Math. Sci., 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: zinovieva-mr@yandex.ru.

A. S. Kondrat'ev 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: a.s.kondratiev@imm.uran.ru.