

Title: Quasirecognition by prime graph of simple group $D_n(3)$

Author(s): B. Khosravi, Z. Akhlaghi and M. Khatami

Let G be a finite group. The prime graph $\Gamma(G)$ of G is defined as follows. The vertices of $\Gamma(G)$ are the primes dividing the order of G and two distinct vertices p and p' are joined by an edge if there is an element in G of order pp' . It is proved that $D_n(q)$, with disconnected prime graph, is quasirecognizable by their element orders. In this paper as the main result, we show that $D_n(3)$, where $n \in \{p, p+1\}$ for an odd prime $p > 3$, is quasirecognizable by its prime graph.

Address:

B. Khosravi

Department of Pure Mathematics

Faculty of Mathematics and Computer Science

Amirkabir University of Technology (Tehran Polytechnic)

424, Hafez Ave., Tehran 15914

IRAN

Address:

Z. Akhlaghi

Department of Pure Mathematics

Faculty of Mathematics and Computer Science

Amirkabir University of Technology (Tehran Polytechnic)

424, Hafez Ave., Tehran 15914

IRAN

Address:

M. Khatami

Department of Pure Mathematics

Faculty of Mathematics and Computer Science

Amirkabir University of Technology (Tehran Polytechnic)

424, Hafez Ave., Tehran 15914

IRAN