

**CLASSES OF CONJUGATE ELEMENTS IN FINITARY PERMUTATION
GROUPS****V. V. Belyaev**

Received April 1, 2014

We study the permutation properties of the conjugacy actions of a finitary permutation group on its classes of conjugate elements. These properties are used to show that classes of conjugate elements in finitary permutation groups are discrete subsets with respect to any Hausdorff group topology. Moreover, it is proved that the above property characterizes alternating groups in the class of countable locally finite simple groups.

Keywords: finitary permutation groups, unconditionally discrete sets, minimal group topologies.

V. V. Belyaev Dr. Phys.-Math. Sci., Prof., Krasovskii Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences, Yekaterinburg, 620990 Russia, e-mail: v.v.belyaev@list.ru.

Cite this article as:

V. V. Belyaev, Classes of conjugate elements in finitary permutation groups, *Tr. Inst. Mat. Mekh. UrO RAN*, 2015, vol. 21, no. 3, pp. 63–77.