

MSC: 20B15, 20D06, 05C25

DOI: 10.21538/0134-4889-2016-22-2-177-187

**STABILIZERS OF VERTICES OF GRAPHS WITH PRIMITIVE
AUTOMORPHISM GROUPS AND A STRONG VERSION
OF THE SIMS CONJECTURE. II**

Received December 20, 2015

A. S. Kondrat'ev, V. I. Trofimov

This is the second in a series of papers whose results imply the validity of a strengthened version of the Sims conjecture on finite primitive permutation groups. In this paper, the case of primitive groups with simple socle of exceptional Lie type and non-parabolic point stabilizer is considered.

Keywords: finite primitive permutation group, almost simple group, group of exceptional Lie type, stabilizer of a point, Sims conjecture.

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 .

V.I. Trofimov, Dr. Phys.-Math. Sci., Krasovskii Institute of Mathematics and Mechanics, Ural Branch of the Russian Academy of Sciences, Yekaterinburg, 620990 Russia, e-mail: trofimov@imm.uran.ru .

Cite this article as:

A. S. Kondrat'ev, V. I. Trofimov. Stabilizers of vertices of graphs with primitive automorphism groups and a strong version of the Sims conjecture. II, *Trudy Inst. Mat. Mekh. UrO RAN*, 2016, vol. 22, no. 2, pp. 177–187.