

Symmetries and Colorings of Groups

Yuliya Zelenyuk

A symmetry on a group G is a mapping $G \ni x \mapsto gx^{-1}g \in G$, where $g \in G$. This notion has interesting relations to Ramsey theory and to enumerative combinatorics. We will discuss some old and new results in this field [1, 2, 3].

REFERENCES

- [1] T. Banakh and I. Protasov, Symmetry and colorings: Some results and open problems, *Voprosy Algebra* - 17, Gomel, No 3 (6) (2001), 4–15.
- [2] I. Kashuba and Yu. Zelenyuk, The number of symmetric colorings of the dihedral group D_3 , preprint (2013).
- [3] Yu. Zelenyuk, Symmetric colorings of finite groups, *LMS Lecture Note Series* **388** (2011), 580–590.

yuliya.zelenyuk@wits.ac.za
University of the Witwatersrand
South Africa