

**Kopytov, V. M.**

**Non-Abelian varieties of lattice-ordered groups in which every solvable  $\ell$ -group is Abelian.**  
(Russian) [Zbl 0574.06012](#)  
Mat. Sb., N. Ser. 126(168), No. 2, 247-266 (1985).

From the author's introduction: "In the present paper linearly ordered groups (l.o. groups) are constructed which possess a number of interesting properties and a variety of  $\mathfrak{o}$ -approximable  $\ell$ -groups in which solvable non-abelian  $\ell$ -groups do not exist. In particular, the l.o. group  $F$  constructed in §§ 2 and 3 possesses the following properties:  $F$  is non-abelian with the property  $e < a \ll b$  implies  $a \ll b^{-1}ab$ ; the factor group  $H/N$  of a subgroup  $H$  of  $F$  modulo a convex and normal (with respect to  $H$ ) subgroup  $N$  is either abelian or non-solvable. The variety of  $\ell$ -groups  $\ell\text{-var } F$  generated by  $F$  is non-abelian and consists of  $\mathfrak{o}$ -approximable  $\ell$ -groups and each of its solvable  $\ell$ -groups is abelian. This variety is a new example of a minimal cover of the  $\ell$ -variety of the abelian  $\ell$ -groups in the lattice of varieties of  $\ell$ -groups. The description of properties of the l.o. group  $F$  or the variety  $\ell\text{-var } F$  is given in §3 or 4 resp."

Reviewer: [F.Šik](#)

**MSC:**

[06F15](#) Ordered groups  
[08B15](#) Lattices of varieties  
[06B20](#) Varieties of lattices  
[20F60](#) Ordered groups (group-theoretic aspects)  
[20E10](#) Quasivarieties and varieties of groups

Cited in **1** Review  
Cited in **6** Documents

**Keywords:**

linearly ordered groups;  $\mathfrak{o}$ -approximable  $\ell$ -groups; variety of  $\ell$ -groups; solvable  $\ell$ -groups; minimal cover; lattice of varieties of  $\ell$ -groups

**Full Text:** [EuDML](#)