Название публикации:

Pro-P-groups and algebraically closed groups: Application to smart systems

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Аннотация:

In this chapter before we begin to examine pro-P-groups, we return again to the special case in which the factors affecting the system determine the group. In this case the system is a closed associative system with a feedback. Here we dwell briefly upon the modeling of “identical” factors with respect to the structure that act on the system. The question arises as to how all possible structures of connections between factors acting on the system can be described. We shall use the automorphism group of the group of factors that determine the system to this purpose. After that we recall the definition and basic information about algebraically compact groups that are necessary for the study of innovative and pseudo-innovative systems. Algebraically compact groups are in some way a generalization of divisible groups in two following directions: the first line (1) is distinguished as a direct summand from the group containing it, when (2) certain conditions are imposed on how the subgroup is contained in the overgroup. If a divisible group can be defined as a group distinguished as a direct summand from any group that contains it, then an algebraically compact group is a group distinguished as a direct summand from any group that contains it as a pure subgroup.

Ключевые слова:

Algebraically compact groups, Direct and inverse limits, Pro-P-groups, Algebraically compact groups, Automorphism groups, Closed groups, Direct and inverse limits, Innovative systems, p-Group, Smart System