

On the Ordered Set of Sequences of Commutator Operations

Nebojša Mudrinski

Department of Mathematics and Informatics, Faculty of
Sciences, University of Novi Sad
Novi Sad, Serbia

Given the congruence lattice \mathbf{L} of a finite algebra \mathbf{A} that generates congruence modular variety, we look for those sequences of operations on \mathbf{L} that are sequences of higher commutator operations of expansions of \mathbf{A} . If we introduce the order of such sequences in the natural way, one can ask the following question: Does the largest element in this ordered set exist? We provide a positive answer. Nevertheless, we prove that it forms a complete lattice.

This is joint research with E. Aichinger.