

FLOCKS IN UNIVERSAL AND BOOLEAN ALGEBRAS

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Abstract

We propose the notion of flocks, which formerly were introduced only in based algebras, for any universal algebra. This generalization keeps the main properties we know from vector spaces, e.g. a closure system that extends the subalgebra one. It comes from the idempotent elementary functions, we call “interpolators”, that in case of vector spaces merely are linear functions with normalized coefficients.

The main example, we consider outside vector spaces, concerns Boolean algebras, where flocks form “local” algebras with a sparseness similar to the one of vector spaces. We also outline the problem of generalizing the Segre transformations of based algebras, which used certain flocks, in order to approach a general transformation notion.

Keywords: combinators, elementary functions, closure system, interpolators, semi-affine lattice.

2000 Mathematics Subject Classification: 08B20, 51D99.

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Received 17 April 2009
Revised 20 December 2009