Título:

Autor: Andréka, Hajnal; Ferenczi, Miklós; Németi, István (Eds.) **Precio:** $2781.01

Editorial: **Año:** 2013

Tema: **Edición:** 1ª

Sinopsis **ISBN:** 9783642350245

A tribute to Tarski's legacy, this volume gives an overview on how a central part of Tarskian algebraic logic developed in the last 30 years
Intends to be a continuation of the Henkin-Monk-Tarski monographs
Contains 18 survey papers on main achievements and on new research directions in the theory since 1985
Gives a glimpse into the state-of-the-art theory of algebras of relations
Algebraic logic is a subject in the interface between logic, algebra and geometry, it has strong connections with category theory and combinatorics. Tarski's quest for finding structure in logic leads to cylindric-like algebras as studied in this book, they are among the main players in Tarskian algebraic logic. Cylindric algebra theory can be viewed in many ways: as an algebraic form of definability theory, as a study of higher-dimensional relations, as an enrichment of Boolean Algebra theory, or, as logic in geometric form ("cylindric" in the name refers to geometric aspects). Cylindric-like algebras have a wide range of applications, in, e.g., natural language theory, data-base theory, stochastics, and even in relativity theory. The present volume, consisting of 18 survey papers, intends to give an overview of the main achievements and new research directions in the past 30 years, since the publication of the Henkin-Monk-Tarski monographs. It is dedicated to the memory of Leon Henkin.?
Content Level » Research

Keywords » Algebraic Logic - Algebras of Relations - Cylindric Algebras - Foundation of Mathematics - Model Theory - Theory Morphisms

Related subjects » Algebra - Mathematics - Theoretical Computer Science

Table of contents Introduction.- H. Andréka and I. Németi: Reducing First-order Logic to Df3, Free Algebras.- N.Bezhanishvili: Varieties of Two-Dimensional Cylindric Algebras.- R. Hirsch and I. Hodkinson: Completions and Complete Representations.- J. Madarász and T. Sayed Ahmed: Amalgamation, Interpolation and Epimorphisms in Algebraic Logic.- T. Sayed Ahmed:

Neat Reducts and Neat Embeddings in Cylindric Algebras.- M. Ferenczi: A New Representation Theory: Representing Cylindric-like Algebras by Relativized Set Algebras.- A. Simon: Representing all Cylindric Algebras by Twisting, On a Problem of Henkin.- A. Kurucz: Representable Cylindric Algebras and Many-Dimensional Modal Logics.- T. Sayed Ahmed: Completions, Complete Representations and Omitting Types.- G. Serény: Elements of Cylindric Algebraic Model Theory.- Y. Venema: Cylindric Modal Logic.- J. van Benthem: Crs and Guarded Logics: A Fruitful Contact.- R. S. Dordevic and M. D. Raskovic: Cylindric Probability Algebras.-I. Duentsch: Cylindric Algebras and Relational Databases. - M. Ferenczi: Probability Measures and Measurable Functions on Cylindric Algebras. - A. Mann: Cylindric Set Algebras and IF Logic. - G. Sági: Polyadic Algebras. - I. Sain: Definability Issues in Universal Logic. - Bibliography. - Index?