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   Descrizione fisica 1 online resource (386 p.)

   Collana            Studies in universal logic

   Disciplina         511.3
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   Soggetti           Model theory
                      Logic, Symbolic and mathematical

   Lingua di pubblicazione    Inglese

   Formato            Materiale a stampa

   Livello bibliografico      Monografia

   Note generali      Description based upon print version of record.

   Nota di bibliografia       Includes bibliographical references and index.

   Nota di contenuto  Categories -- Institutions -- Theories and Models -- Internal Logic --
                      Model Ultraproducts -- Saturated Models -- Preservation and
                      Axiomatizability -- Interpolation -- Definability -- Possible Worlds --
                      Grothendieck Institutions -- Institutions with Proofs -- Specification --
                      Logic Programming.

   Sommario/riassunto A model theory that is independent of any concrete logical system
                      allows a general handling of a large variety of logics. This generality
                      can be achieved by applying the theory of institutions that provides a
                      precise mathematical formulation for the intuitive concept of a logical
                      system. Especially in computer science, where the development of a
                      huge number of specification logics is observable, institution-
                      independent model theory simplifies and sometimes even enables a
                      concise model-theoretic analysis of the system. Besides incorporating
                      important methods and concepts from conventional model theory, the
                      proposed top-down methodology allows for a structurally clean
                      understanding of model-theoretic phenomena. As a consequence,
                      results from conventional concrete model theory can be understood
                      more easily, and sometimes even new results are obtained.