Record Nr. UNINA9910783127203321 Autore Tourlakis George J. Titolo Lectures in logic and set theory . Volume 2 Set theory / / George Tourlakis [[electronic resource]] Cambridge:,: Cambridge University Press,, 2003 Pubbl/distr/stampa **ISBN** 1-107-12857-9 1-280-41777-3 9786610417773 1-139-14854-0 0-511-18061-6 0-511-06659-7 0-511-06028-9 0-511-30271-1 0-511-61556-6 0-511-06872-7 Descrizione fisica 1 online resource (xv, 575 pages) : digital, PDF file(s) Collana Cambridge studies in advanced mathematics:: 83 Disciplina 511.3 Soggetti Logic, Symbolic and mathematical Set theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto Cover; Half-title; Series-title; Title; Copyright; Dedication; Contents; Preface: I A Bit of Logic: A User's Toolbox; II The Set-Theoretic Universe, Naively: III The Axioms of Set Theory: IV The Axiom of Choice: V The Natural Numbers; Transitive Closure; VI Order; VII Cardinality; VIII Forcing; Bibliography; List of Symbols; Index Sommario/riassunto This two-volume work bridges the gap between introductory expositions of logic or set theory on one hand, and the research literature on the other. It can be used as a text in an advanced undergraduate or beginning graduate course in mathematics, computer science, or philosophy. The volumes are written in a user-friendly conversational lecture style that makes them equally effective for self-

study or class use. Volume II, on formal (ZFC) set theory, incorporates a

self-contained 'chapter 0' on proof techniques so that it is based on formal logic, in the style of Bourbaki. The emphasis on basic techniques will provide the reader with a solid foundation in set theory and provides a context for the presentation of advanced topics such as absoluteness, relative consistency results, two expositions of Godel's constructible universe, numerous ways of viewing recursion, and a chapter on Cohen forcing.