

1. Record Nr.	UNINA9910459453503321
Autore	Lurie Jacob <1977->
Titolo	Higher topos theory [[electronic resource] /] / Jacob Lurie
Pubbl/distr/stampa	Princeton, N.J., : Princeton University Press, 2009
ISBN	1-282-64495-5 9786612644955 1-4008-3055-9
Edizione	[Course Book]
Descrizione fisica	1 online resource (944 p.)
Collana	Annals of mathematics studies ; ; no. 170
Disciplina	512/.62
Soggetti	Toposes Categories (Mathematics) Electronic books.
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 indexes.
Nota di contenuto	Frontmatter -- Contents -- Preface -- Chapter One. An Overview Of Higher Category Theory -- Chapter Two. Fibrations Of Simplicial Sets -- Chapter Three. The -Category Of -Categories -- Chapter Four. Limits And Colimits -- Chapter Five. Presentable And Accessible - Categories -- Chapter Six. -Topoi -- Chapter Seven. Higher Topos Theory In Topology -- Appendix -- Bibliography -- General Index -- Index Of Notation
Sommario/riassunto	Higher category theory is generally regarded as technical and forbidding, but part of it is considerably more tractable: the theory of infinity-categories, higher categories in which all higher morphisms are assumed to be invertible. In Higher Topos Theory, Jacob Lurie presents the foundations of this theory, using the language of weak Kan complexes introduced by Boardman and Vogt, and shows how existing theorems in algebraic topology can be reformulated and generalized in the theory's new language. The result is a powerful theory with applications in many areas of mathematics. The book's first five chapters give an exposition of the theory of infinity-categories that emphasizes their role as a generalization of ordinary categories. Many of the fundamental ideas from classical category theory are generalized to the infinity-categorical setting, such as limits and colimits, adjoint

functors, ind-objects and pro-objects, locally accessible and presentable categories, Grothendieck fibrations, presheaves, and Yoneda's lemma. A sixth chapter presents an infinity-categorical version of the theory of Grothendieck topoi, introducing the notion of an infinity-topos, an infinity-category that resembles the infinity-category of topological spaces in the sense that it satisfies certain axioms that codify some of the basic principles of algebraic topology. A seventh and final chapter presents applications that illustrate connections between the theory of higher topoi and ideas from classical topology.

---