1. Record Nr. UNINA9910821730503321

Autore	Neeman Amnon
Titolo	Triangulated categories / / by Amnon Neeman
Pubbl/distr/stampa	Princeton, New Jersey : , : Princeton University Press, , 2001 ©2001
ISBN	0-691-08685-0 1-4008-3721-9
Descrizione fisica	1 online resource (461 p.)
Collana	Annals of Mathematics Studies ; ; Number 148
Disciplina	512/.55
Soggetti	Categories (Mathematics)
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	Front matter -- Contents -- 0. Acknowledgements -- 1. Introduction -- Chapter 1. Definition and elementary properties of triangulated categories -- Chapter 2. Triangulated functors and localizations of triangulated categories -- Chapter 3. Perfection of classes -- Chapter 4. Small objects, and Thomason's localisation theorem -- Chapter 5. The category A(S) -- Chapter 6. The category x (Sop, Ab) -- Chapter 7. Homological properties of x(Sop,b) -- Chapter 8. Brown representability -- Chapter 9. Bousfield localisation -- Appendix A. Abelian categories -- Appendix B. Homological functors into [AB5] categories -- Appendix C. Counterexamples concerning the abelian category A() -- Appendix D. Where is the homotopy category of spectra -- Appendix E. Examples of non-perfectly-generated categories -- Bibliography -- Index
Sommario/riassunto	The first two chapters of this book offer a modern, self-contained exposition of the elementary theory of triangulated categories and their "ients. The simple, elegant presentation of these known results makes these chapters eminently suitable as a text for graduate students. The remainder of the book is devoted to new research, providing, among other material, some remarkable improvements on Brown's classical representability theorem. In addition, the author introduces a class of triangulated categories"--the "well generated triangulated categories" --and studies their properties. This exercise is particularly worthwhile

in that many examples of triangulated categories are well generated, and the book proves several powerful theorems for this broad class. These chapters will interest researchers in the fields of algebra, algebraic geometry, homotopy theory, and mathematical physics.