

1. Record Nr.	UNINA9910144916503321
Titolo	Category Theory and Computer Science : 7th International Conference, CTCS'97, Santa Margherita Ligure Italy, September 4-6, 1997, Proceedings // edited by Eugenio Moggi, Giuseppe Rosolini
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1997
ISBN	3-540-69552-4
Edizione	[1st ed. 1997.]
Descrizione fisica	1 online resource (IX, 319 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 1290
Disciplina	004/.01/5113
Soggetti	Computer architecture Programming languages (Electronic computers) Computer logic Logic, Symbolic and mathematical K-theory Computer System Implementation Programming Languages, Compilers, Interpreters Logics and Meanings of Programs Mathematical Logic and Formal Languages K-Theory Mathematical Logic and Foundations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	An introduction to n-categories -- Allegories as a basis for algorithmics -- Separating shape from data -- A factorisation theorem in rewriting theory -- Monads and modular term rewriting -- A 2-categorical presentation of term graph rewriting -- Presheaf models for the λ -calculus -- Categorical modelling of structural operational rules case studies -- Specifying interaction categories -- Shedding new light in the world of logical systems -- Combining and representing logical systems -- A deciding algorithm for linear isomorphism of types with complexity $O(n \log 2(n))$. -- Effectiveness of the global modulus of continuity on metric spaces -- Proof principles for datatypes with iterated recursion -- When Do Datatypes Commute? -- A calculus for

collections and aggregates -- Lifting -- General synthetic domain theory — A logical approach (extended abstract).

Sommario/riassunto

This book constitutes the refereed proceedings of the 7th International Conference on Category Theory and Computer Science, CTCS'97, held in Santa Margheria Ligure, Italy, in September 1997. Category theory attracts interest in the theoretical computer science community because of its ability to establish connections between different areas in computer science and mathematics and to provide a few generic principles for organizing mathematical theories. This book presents a selection of 15 revised full papers together with three invited contributions. The topics addressed include reasoning principles for types, rewriting, program semantics, and structuring of logical systems.
