Record Nr. UNISA996466139103316 Category Theory and Computer Science [[electronic resource]]: 6th **Titolo** International Conference, CTCS '95, Cambridge, United Kingdom, August 7 - 11, 1995. Proceedings / / edited by David Pitt, David E. Rydeheard, Peter Johnstone Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1995 **ISBN** 3-540-44661-3 Edizione [1st ed. 1995.] Descrizione fisica 1 online resource (IX, 259 p.) Lecture Notes in Computer Science, , 0302-9743;; 953 Collana Disciplina 005.13/1 Soggetti Computer science—Mathematics Computer logic Mathematical logic Software engineering Programming languages (Electronic computers) K-theory Mathematics of Computing Logics and Meanings of Programs Mathematical Logic and Formal Languages Software Engineering Programming Languages, Compilers, Interpreters K-Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Control structures: A model of interaction -- Convenient category of processes and simulations I: Modulo strong bisimilarity -- Dualities between nets and automata induced by schizophrenic objects --Relational set theory -- Proof of a S.Mac Lane conjecture (extended abstract) -- Effective applicative structures -- The S-replete construction -- The convex powerdomain in a category of posets realized by cpos -- Lifting as a KZ-doctrine -- Categorical fixed point

calculus -- A category-theoretic treatment of a parallel algol-like

## Sommario/riassunto

language -- Categorical reconstruction of a reduction free normalization proof -- Decomposing typed lambda calculus into a couple of categorical programming languages -- V-comprehensions and P space -- A proposed categorical semantics for ML modules.

This book presents the proceedings of the Sixth International Conference on Category Theory and Computer Science, CTCS '95, held in Cambridge, UK in August 1995. The 15 revised full papers included in the volume document the exploitation of links between logic and category theory leading to a solid basis for much of the understanding of the semantics of computation. Notable amongst other advances is the introduction of linear logic and other substructural logics, providing a new approach to proof theory. Further aspects covered are semantics of lambda calculi and type theories, program specification and development, and domain theory.