Record Nr. UNISA996466249703316 Types for Proofs and Programs [[electronic resource]]: International **Titolo** Workshop TYPES '93, Nijmegen, The Netherlands, May 24 - 28, 1993. Selected Papers / / edited by Henk Barendregt, Tobias Nipkow Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-48440-X Edizione [1st ed. 1994.] 1 online resource (IX, 395 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743 ; ; 806 Collana 005.1/01/5113 Disciplina Soggetti Computers Software engineering Mathematical logic Computer logic Artificial intelligence Theory of Computation Software Engineering/Programming and Operating Systems Mathematical Logic and Formal Languages Logics and Meanings of Programs Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di contenuto Proving strong normalization of CC by modifying realizability semantics -- Checking algorithms for Pure Type Systems -- Infinite objects in type theory -- Conservativity between logics and typed? calculi --Logic of refinement types -- Proof-checking a data link protocol --Elimination of extensionality in Martin-Löf type theory -- Programming with streams in Cog a case study: The Sieve of Eratosthenes -- The Alf proof editor and its proof engine -- Encoding Z-style Schemas in type theory -- The expressive power of Structural Operational Semantics with explicit assumptions -- Developing certified programs in the system Cog the program tactic -- Closure under alpha-conversion --Machine Deduction -- Type theory and the informal language of

mathematics -- Semantics for abstract clauses.

Sommario/riassunto

This volume contains thoroughly refereed and revised full papers selected from the presentations at the first workshop held under the auspices of the ESPRIT Basic Research Action 6453 Types for Proofs and Programs in Nijmegen, The Netherlands, in May 1993. As the whole ESPRIT BRA 6453, this volume is devoted to the theoretical foundations, design and applications of systems for theory development. Such systems help in designing mathematical axiomatisation, performing computer-aided logical reasoning, and managing databases of mathematical facts; they are also known as proof assistants or proof checkers.