Record Nr. UNISA996465945603316 Types for Proofs and Programs [[electronic resource]]: International **Titolo** Workshop TYPES'96, Aussois, France, December 15-19, 1996 Selected Papers // edited by Eduardo Gimenez, Christine Paulin-Mohring Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 1998 **ISBN** 3-540-49562-2 Edizione [1st ed. 1998.] 1 online resource (VIII, 380 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743;; 1512 Collana Disciplina 004/.01/5113 Soggetti Software engineering Computer logic Mathematical logic Programming languages (Electronic computers) Artificial intelligence Software Engineering/Programming and Operating Systems Logics and Meanings of Programs Mathematical Logic and Formal Languages Programming Languages, Compilers, Interpreters Artificial Intelligence Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Coercion synthesis in computer implementations of type-theoretic frameworks -- Verification of the interface of a small proof system in cog -- An implementation of the Heine-Borel covering theorem in type theory -- Detecting and removing dead-code using rank 2 intersection -- A type-free formalization of mathematics where proofs are objects -- Higman's lemma in type theory -- A proof of weak termination of typed ??-calculi -- Proof style -- Some algorithmic and prooftheoretical aspects of coercive subtyping -- Semantical BNF -- The internal type theory of a Heyting pretopos -- Inverting inductively defined relations in LEGO -- A generic normalisation proof for pure type systems -- Proving a real time algorithm for ATM in Coq --

Dependent types with explicit substitutions: A meta-theoretical

Sommario/riassunto

development -- Type inference verified: Algorithm W in Isabelle/HOL -- Continuous lattices in formal topology -- Abstract insertion sort in an extension of type theory with record types and subtyping.

This book constitutes the thoroughly revised post-workshop proceedings of the first annual workshop held under the auspices of the ESPRIT Working Group 21900 TYPES in Aussois, France in December 1996. The 18 revised full papers presented in the book were carefully reviewed and selected from the 30 papers accepted for presentation at the workshop. All current aspects of type theory and type systems and their applications to program verification and theorem proving are addressed; the proof systems and theorem provers dealt with include Coq, LEGO, and Isabelle/HOL.