1. Record Nr. UNISA996465431103316

Titolo	Types for Proofs and Programs [[electronic resource]] : International Workshop, TYPES 2003, Torino, Italy, April 30 - May 4, 2003, Revised Selected Papers / / edited by Stefano Berardi, Mario Coppo, Ferruccio Damiani
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2004
ISBN	3-540-24849-8 3-540-22164-6
Edizione	[1st ed. 2004.]
Descrizione fisica	1 online resource (X, 412 p.)
Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 3085
Disciplina	004/.01/5113
Soggetti	Programming languages (Electronic computers) Computer logic Mathematical logic Artificial intelligence Programming Languages, Compilers, Interpreters Logics and Meanings of Programs Mathematical Logic and Formal Languages Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	A Modular Hierarchy of Logical Frameworks -- Tailoring Filter Models -- Locales and Locale Expressions in Isabelle/Isar -- to PAF!, a Proof Assistant for ML Programs Verification -- A Constructive Proof of Higman’s Lemma in Isabelle -- A Core Calculus of Higher-Order Mixins and Classes -- Type Inference for Nested Self Types -- Inductive Families Need Not Store Their Indices -- Modules in Coq Are and Will Be Correct -- Rewriting Calculus with Fixpoints: Untyped and First-Order Systems -- First-Order Reasoning in the Calculus of Inductive Constructions -- Higher-Order Linear Ramified Recurrence -- Confluence and Strong Normalisation of the Generalised Multiary ?-Calculus -- Wellfounded Trees and Dependent Polynomial Functors --

Classical Proofs, Typed Processes, and Intersection Types -- “Wave-Style” Geometry of Interaction Models in Rel Are Graph-Like Lambda-Models -- Coercions in Hindley-Milner Systems -- Combining Incoherent Coercions for ? -Types -- Induction and Co-induction in Sequent Calculus -- QArith: Coq Formalisation of Lazy Rational Arithmetic -- Mobility Types in Coq -- Some Algebraic Structures in Lambda-Calculus with Inductive Types -- A Concurrent Logical Framework: The Propositional Fragment -- Formal Proof Sketches -- Applied Type System.

Sommario/riassunto

These proceedings contain a selection of refereed papers presented at or related to the 3rd Annual Workshop of the Types Working Group (Computer-Assisted Reasoning Based on Type Theory, EU IST project 29001), which was held d- ing April 30 to May 4, 2003, in Villa Gualino, Turin, Italy. The workshop was attended by about 100 researchers. Out of 37 submitted papers, 25 were selected after a refereeing process. The ?nal choices were made by the editors. Two previous workshops of the Types Working Group under EU IST project 29001 were held in 2000 in Durham, UK, and in 2002 in Berg en Dal (close to Nijmegen), The Netherlands. These workshops followed a series of meetings organized in the period 1993–2002 within previous Types projects (ESPRIT BRA 6435 and ESPRIT Working Group 21900). The proceedings of these e- lier workshops were also published in the LNCS series, as volumes 806, 996, 1158, 1512, 1657, 2277, and 2646. ESPRIT BRA 6453 was a continuation of ESPRIT Action 3245, Logical Frameworks: Design, Implementation and Ex- riments. Proceedings for annual meetings under that action were published by Cambridge University Press in the books “Logical Frameworks”, and “Logical Environments”, edited by G. Huet and G. Plotkin. We are very grateful to the members of the research group “Semantics and Logics of Computation” of the Computer Science Department of the University of Turin, who helped organize the Types 2003 meeting in Torino.