

1. Record Nr.	UNINA9910143883803321
Titolo	Automated Deduction - CADE-18 : 18th International Conference on Automated Deduction, Copenhagen, Denmark, July 27-30, 2002 Proceedings // edited by Andrei Voronkov
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2002
ISBN	3-540-45620-1
Edizione	[1st ed. 2002.]
Descrizione fisica	1 online resource (XII, 540 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 2392
Disciplina	006.3/33
Soggetti	Artificial intelligence Logic, Symbolic and mathematical Computer logic Programming languages (Electronic computers) Artificial Intelligence Mathematical Logic and Formal Languages Logics and Meanings of Programs Programming Languages, Compilers, Interpreters
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 and index.
Nota di contenuto	Description Logics and Semantic Web -- Reasoning with Expressive Description Logics: Theory and Practice -- BDD-Based Decision Procedures for -- Proof-Carrying Code and Compiler Verification -- Temporal Logic for Proof-Carrying Code -- A Gradual Approach to a More Trustworthy, Yet Scalable, Proof-Carrying Code -- Formal Verification of a Java Compiler in Isabelle -- Non-classical Logics -- Embedding Lax Logic into Intuitionistic Logic -- Combining Proof-Search and Counter-Model Construction for Deciding Gödel-Dummett Logic -- Connection-Based Proof Search in Propositional BI Logic -- System Descriptions -- DDDLIB: A Library for Solving Quantified Difference Inequalities -- An LCF-Style Interface between HOL and First-Order Logic -- System Description: The MathWeb Software Bus for Distributed Mathematical Reasoning -- Proof Development with ?mega -- Learn?matic: System Description -- HyLoRes 1.0: Direct Resolution

for Hybrid Logics -- SAT -- Testing Satisfiability of CNF Formulas by Computing a Stable Set of Points -- A Note on Symmetry Heuristics in SEM -- A SAT Based Approach for Solving Formulas over Boolean and Linear Mathematical Propositions -- Model Generation -- Deductive Search for Errors in Free Data Type Specifications Using Model Generation -- Reasoning by Symmetry and Function Ordering in Finite Model Generation -- Algorithmic Aspects of Herbrand Models Represented by Ground Atoms with Ground Equations -- Session 7 -- A New Clausal Class Decidable by Hyperresolution -- CASC -- Spass Version 2.0 -- System Description: GrAnDe 1.0 -- The HR Program for Theorem Generation -- AutoBayes/CC — Combining Program Synthesis with Automatic Code Certification — System Description — -- CADE-CAV Invited Talk -- The Quest for Efficient Boolean Satisfiability Solvers -- Session 9 -- Recursive Path Orderings Can Be Context-Sensitive -- Combination of Decision Procedures -- Shostak Light -- Formal Verification of a Combination Decision Procedure -- Combining Multisets with Integers -- Logical Frameworks -- The Reflection Theorem: A Study in Meta-theoretic Reasoning -- Faster Proof Checking in the Edinburgh Logical Framework -- Solving for Set Variables in Higher-Order Theorem Proving -- Model Checking -- The Complexity of the Graded  $\exists$ -Calculus -- Lazy Theorem Proving for Bounded Model Checking over Infinite Domains -- Equational Reasoning -- Well-Foundedness Is Sufficient for Completeness of Ordered Paramodulation -- Basic Syntactic Mutation -- The Next Waldmeister Loop -- Proof Theory -- Focussing Proof-Net Construction as a Middleware Paradigm -- Proof Analysis by Resolution.

---

#### Sommario/riassunto

The First CADE in the Third Millennium This volume contains the papers presented at the Eighteenth International Conference on Automated Deduction (CADE-18) held on July 27–30th, 2002, at the University of Copenhagen as part of the Federated Logic Conference (FLoc 2002). Despite a large number of deduction-related conferences springing into existence at the end of the last millennium, the CADE conferences continue to be the major forum for the presentation of new research in all aspects of automated deduction. CADE-18 was sponsored by the Association for Automated Reasoning, CADE Inc., the Department of Computer Science at Chalmers University, the Gesellschaft für Informatik, Safelogic AB, and the University of Koblenz-Landau. There were 70 submissions, including 60 regular papers and 10 system descriptions. Each submission was reviewed by at least 5 program committee members and an electronic program committee meeting was held via the Internet. The committee decided to accept 27 regular papers and 9 system descriptions. One paper switched its category after refereeing, thus the total number of system descriptions in this volume is 10. In addition to the refereed papers, this volume contains an extended abstract of the CADE invited talk by Ian Horrocks, the joint CADE/CAV invited talk by Sharad Malik, and the joint CADE-TABLEAUX invited talk by Matthias Baaz. One more invited lecture was given by Daniel Jackson.

---