Contents

Jürgen Avenhaus ......................................................... 5
A Reduction Ordering for Higher-Order Terms
Franz Baader ............................................................. 5
Combination of Constraint Solving Techniques: An Algebraic Point of View
Leo Bachmair ............................................................. 6
Integrating Automated Deduction and Symbolic Computation Techniques
Christoph Beierle ........................................................ 6
Type Inferencing for First Order Logic with Polymorphic Order-Sorted Types
Wolfgang Bibel ........................................................... 7
Decomposition of Tautologies into Regular Formulas and Strong Completeness of Connection-Graph Resolution
Maria Paola Bonacina .................................................... 8
Semantic Resolution, Lemmaizing and Contraction
Jochen Burghardt .......................................................... 8
Towards a Decidable Class of n-ary Horn Predicates
Shang-Ching Chou ......................................................... 9
Automated Production of Human-Readable Proofs in Geometry
Bernd Ingo Dahn ........................................................... 9
Structuring Theories and Proofs
Nachum Dershowitz ....................................................... 10
Rewrite-Based Deduction: Expansion and Contraction
Amy Felty ................................................................. 10
Formalizing Inductive Proofs of Network Algorithms
Masayuki Fujita ............................................................ 11
More on Quasigroup Open Problems
Ulrich Furbach

Model Elimination, Logic Programming and Computing Answers

Harald Ganzinger

Locality and Saturation

Jörg Siekmann

Proof Presentation

Wolfgang Küchlin

Parallel Term Rewriting with PaReDuX

Alexander Leitsch

Function Introduction in Clause Logic

Reinhold Letz

LINUS: A Link Instantiation Prover With Unit Support

William McCune

Automated Deduction in Algebraic Geometry

Toshiro Minami

Derived Rules for the Generic Reasoning Assistant System EUODHILOS-II

Robert Nieuwenhuis

Implementing Deduction with Constraints

Tobias Nipkow

Programming Language Semantics in Isabelle

Hans Jürgen Ohlbach

Term Indezing, a Parallel Theorem Prover, More Parallelism by Transformation

Hiroshi G. Okuno

Theorem Proving with Binary Decision Diagrams

William Pase

Proof Logging and Proof Checking in NEVER

Lawrence C. Paulson

Mechanising Set Theory: Cardinal Arithmetic and the Axiom of Choice

Paolo Pecchiari

Reasoning Theories: Towards an Architecture for Open Mechanized Reasoning Systems

Uwe Petermann

A Flexible Theorem Prover