FTP'98 – Final Program

Monday, 23 November 1998

9:00 **Opening Address**

Session I: Invited talk

9:10 Decision procedures and model building, or How to improve logical information in ATP
Alexander Leitsch

10:10 **Coffee break**

Session II: Constrained clause logic

10:40 Proof generalization and function introduction
Nicolas Peltier
11:10 Completeness and redundancy in constrained clause logic
Reinhard Pichler
11:40 Extending decidable clause classes via constraints
Reinhard Pichler

12:10 **Lunch break**

Session III: Decision procedures

14:10 An $\mathcal{O}((n \cdot \log n)^3)$-time transformation from Grz into decidable fragments of classical first-order logic
Stephane Demri and Rajeev Gore
14:40 Issues of decidability for description logics in the framework of resolution
Ullrich Hustadt and Renate A. Schmidt
15:10 A new fast tableau-based decision procedure for an unquantified fragment of set theory
Domenico Cantone and Calogero G. Zarba

15:40 **Coffee break**

Session IV: Interpretation & Verification

16:10 How complex is a finite first-order sorted interpretation?
Thierry Boy de la Tour
16:40 Computational representations of models of first-order formulas
Robert Matzinger
16:55 Interpretation of a Mizar-like logic in first-order logic
Ingo Dahn
17:25 Verifying textbook proofs
Claus Zinn

Tuesday, 24 November 1998

Session V: Invited talk

9:00 Quantified modal logic
Melvin Fitting

10:30 **Coffee break**

Session VI: Many-valued logics

11:00 Implicational completeness of signed resolution
Christian Fermüller
11:30 Resolution-based theorem proving for SHn-logics
Viorica Sofronie-Stokkermans
12:00 A new resolution calculus for the infinite-valued propositional logic of Łukasiewicz
Hubert Wagner

12:30 **Lunch break**

Session VII: Tableaux & First-order theorem proving

14:30 A further and effective liberalization of the δ-rule in free variable semantic tableaux
Domenico Cantone and Marianna Nicolosi Asmundo
15:00 Full first-order sequent and tableau calculi with preservation of solutions and the liberalized δ-rule but without skolemization
Claus-Peter Wirth
15:30 A partial instantiation based first order theorem prover
J.N. Hooker, G. Rago, Vijay Chandru, and Anjul Shrivastava
16:00 Theorem proving strategies: a search oriented taxonomy
Maria Paola Bonacina

16:15 **Coffee break**

Session VIII: Panel discussion

16:45 Concepts, logics and research methodologies in automated deduction
Chairs: Maria Paola Bonacina and Ricardo Caferra
Panelists: Domenico Cantone, Gilles Dowek, Melvin Fitting, and Alexander Leitsch

17:45 **Business meeting**

19:00 **Dinner at a Viennese "Heuriger"**

Wednesday, 25 November 1998

Session IX: Invited talk

9:00 Automated theorem proving in first-order logic modulo: on the difference between type theory and set theory
Gilles Dowek

10:30 **Coffee break**

Session X: Equational reasoning

11:00 Constraint contextual rewriting
Alessandro Armando and Silvio Ranise
11:30 An equational re-engineering of set theories
Andrea Formisano and Eugenio Omodeo
12:00 Hidden congruent deduction
Grigore Rosu and Joseph Goguen

12:30 **Lunch break**

Session XI: Proof theory

14:30 Upper bound on the height of terms in proofs with cuts
Boris Konev
15:00 Effective properties for some first order intuitionistic modal logics
Aida Pliuškevičienė

15:30 **Coffee break**

16:00 **Closing discussion**