

## **Special Issue on the Italian Conference on Computational Logic: CILC 2009**

### **Preface**

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This special issue of *Fundamenta Informaticae* contains the revised, extended versions of selected papers presented at the Italian Conference on Computational Logic (Convegno Italiano di Logica Computazionale, CILC'09) which was held at the Engineering Department of the University of Ferrara, Italy.

This conference was the twenty-fourth edition of the Italian national congress of the GULP Association (Gruppo Ricercatori e Utenti di Logic Programming) which gathers researchers and users of Logic Programming. Since the first edition in Genoa in 1986, the GULP Association organizes every year a scientific meeting to present ideas, tools, and new advances in Computational Logic and related areas, such as Artificial Intelligence and Deductive Databases. All these areas had a very significant growth over the last decades and nowadays they all play a crucial role in the fields of Information Processing and Computer Science.

The CILC'09 meeting was attended by more than fifty people and 28 papers were presented. Out of those papers, 13 papers were selected and their authors were invited to submit an improved version for publication in this special issue. After two rounds of careful reviews, where each article was assigned to at least three reviewers, we finally chose 8 papers which now appear in this present issue.

The following people helped us in the reviewing process: Thomas Ågotnes, Annalisa Appice, Federico Bergenti, Johan Bos, Stefano Bragaglia, Andrea Brogi, Ismel Brito Rodriguez, Martin Cooper, Nihan Kesim Çiçekli, James Cussens, Alessandro Dal Palù, Luc De Raedt, Yannis Dimopoulos, Redouane Ez-zahir, Andrea Formisano, Camillo Fiorentini, Federico Gobbo, Manfred Jaeger, Tomi Janhunen, Tommi Junttila, Mathias Kleiner, Sava Krstic, Marco Marano, Viviana Mascardi, Alessandro Mosca, Leliane Nunes de Barros, Maria Silvia Pini, Gian Luca Pozzato, Maurizio Proietti, Franco Raimondi, Valerio Senni, Heiner Stuckenschmidt, Andrei Taminlin, Paolo Torroni, Peter van Beek, Hannes Werthner, and Herbert Wiklicky. We deeply thank each of them for their work. Their comments and criticism were very important to ensure a good quality of the papers.

Among the accepted papers, two refer to Answer Set Programming (ASP). In particular, the paper by S. Costantini, A. Formisano, and D. Petturiti extends ASP with the concept of the production and consumption of resources, and the paper by F. Ricca, A. Dimasi, G. Grasso, S. M. Ielpa, S. Iiritano, M. Manna, and N. Leone applies ASP to a real life problem in the tourism industry.

Three papers deal with constraint satisfaction problems. S. Bistarelli and G. Gosti discuss a probabilistic approach to the solution of Distributed Constraint Satisfaction Problems; A. Dovier, A. Formisano, and E. Pontelli address the issue of multi-agent planning in Constraint Logic Programming, and D. Campagna, C. De Rosa, A. Dovier, A. Montanari, and C. Piazza use Constraint Logic Programming for configuring commercial products.

The paper by F. Chesani, P. Mello, M. Montali, and P. Torroni presents a reactive calculus of events based on abductive logic programming.

The paper by E. Nicolini, C. Ringeissen, and M. Rusinowitch provides some decidability results for the universal fragment of theories which model data structures and are endowed with arithmetic constraints.

Finally, the paper by M. Faella, M. Napoli, and M. Parente studies the model-checking problem in the Alternating-Time Temporal Logic with graded modalities.

We would like to express our gratitude to the Gruppo Nazionale per il Calcolo Scientifico, GNCS (National Group for Scientific Computation), and the University of Ferrara for their financial support.

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