

Preface

The 33rd edition of the Italian Convention of Computational Logic (CILC 2018), the annual meeting organized by GULP (Gruppo ricercatori e Utenti Logic Programming), was hosted by the Free University of Bozen-Bolzano, from September 20th to September 22nd, 2018. CILC is the leading forum for the exchange of ideas and experiences between Italian researchers working in the theory and practice of computational logic, although it has broadened its topics of interest also to related areas.

The technical program of CILC 2018 included 21 presentations, among which 13 papers are included in these proceedings and further 8 appeared or have been submitted elsewhere. Paper selection was made by peer reviewing, and each submitted paper received three reviews by members of the Program Committee. The contributions address different topics related to computational logic, including verification and validation, temporal and spatial reasoning, description logics, probabilistic reasoning, constraint logic programming.

The program was also enriched by the keynote “Reasoning and Planning for LTL_f/LDL_f goals” by *Giuseppe De Giacomo*, Sapienza University of Rome, and with 2 tutorials:

- Probabilistic logic languages and their combination
Riccardo Zese, University of Ferrara
- Ontology-based Data Access: Relational Data and Beyond
Diego Calvanese, Free University of Bozen-Bolzano

In addition, we had the pleasure of hosting a special session where *Alberto Pettorossi* shared his professional experience and highlighted his personal contribution to the field of computational logic.

The presentations of papers not included in the proceedings were the following:

- Reasoning with Justifiable Exceptions in Contextual Hierarchies
Loris Bozzato, Thomas Eiter, Luciano Serafini
- Meta-programming and symbolic execution for detecting run-time errors in Erlang programs
Emanuele De Angelis, Fabio Fioravanti, Adrian Palacios, Alberto Pettorossi, Maurizio Proietti
- Deciding the Consistency of Branching Time Interval Networks
Marco Gavanelli, Alessandro Passantino, Guido Sciavicco
- A set-based reasoner for the description logic $DL_D^{4,x}$
Domenico Cantone, Marianna Nicolosi-Asmundo, Daniele Francesco Santamaria
- Persistent Stochastic Non-Interference
Carla Piazza, Sabina Rossi, Jane Hillston
- Verification of Data-Aware Processes via Array-Based Systems (Abridged Version)
Diego Calvanese, Silvio Ghilardi, Alessandro Gianola, Marco Montali, Andrey Rivkin
- Modeling and Reasoning over Declarative Data-Aware Processes: The Object-Centric Behavioral Constraint Approach
Alessandro Artale, Marco Montali, Wil van der Aalst
- Declarative Parameterized Verification of Topology-sensitive Distributed Protocols
Giorgio Delzanno, Sylvain Conchon, Angelo Ferrando

We would like to thank all the people who have contributed to the success of CILC 2018: the authors, the tutorials and keynote speakers, the reviewers, the participants, the local organizers and sponsors. Special thanks goes to the President of GULP, Agostino Dovier, and the secretary of GULP, Marco Gavanelli, for their support in the organization of the event.

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Paolo Felli, Marco Montali