

Proceedings of the 36th Italian Conference on Computational Logic (CILC 2021)

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The Italian conference on Computational Logic¹ (*Convegno Italiano di Logica Computazionale, CILC*) is the annual conference organized by the Italian group of researchers and users of logic programming² (*Gruppo ricercatori e Utenti Logic Programming, GULP*). Since the first event of the series, which was held in Genoa in 1986, the annual conference organized by GULP has been representing a major opportunity for researchers and practitioners working in the field of Computational Logic to meet and exchange ideas. The conference has broadened its horizons over the years and, today, it embraces topics that extend its reach beyond Computational Logic, such as declarative programming, knowledge representation, automated theorem proving, and virtually all applications of Computational Logic in the broader field of Artificial Intelligence.

The series of conferences organized by GULP has always been relevant to the GULP community, and Italian researchers and practitioners consider it as an indispensable tradition of the community. The 36th edition of the conference marks the attempt to return to normality after the COVID-19 pandemic and the consequent global health crisis. The conference was organized as a regular pre-pandemic event from September 7th, 2021 to September 9th, 2021 in Parma, and it was attended in person by 26 participants. Other 31 participants joined the conference remotely using a dedicated virtual meeting space, which was used to stream and record the presentations of accepted papers.

Despite the impossibility for many participants to join the conference in person, the community delivered a solid response to the urge of normality that characterized the days of the event. The 36th edition of the conference featured 23 presentations of high-quality papers, 14 of which were original works. Accepted contributions ranged from foundational and theoretical results to practical experiences, case studies, and applications, and they covered a wide range of relevant topics broadly related to Computational Logic. Accepted contributions included papers on agents and multi-agent systems, (constraint) logic programming, argumentation, and practical applications of logic programming. It is worth noting that accepted papers went through a strict evaluation process. Each original submission was evaluated by at least three anonymous reviewers from the Program

¹ www.aialab.unipr.it/cilc21

² www.programmazionelogica.it

Committee to ensure that the quality of papers met the high quality standards of the conference. Each non-original submission was reviewed by at least one anonymous reviewer from the Program Committee to check for the coherence with the aims and scope of the conference. Note that, following the tradition of the conference, non-original submissions are not included in this proceedings.

The technical program of the 36th edition of the conference was also enriched by one keynote speech delivered by a renowned international expert. Marco Lippi, from Università degli Studi di Modena e Reggio Emilia, delivered a keynote speech entitled *Neuro-Symbolic Learning and Reasoning for Natural Language Processing Tasks*. The keynote speech was intended to provide a self-contained review of the state of the art of a very relevant topic of the current research on Artificial Intelligence, and it resulted in lively discussions among participants during the days of the conference.

In conclusion, we would like to warmly thank all the people who contributed to CILC 2021. First, we would like to thank all the authors of the submitted papers, the invited speaker, the members of the Program Committee, and the anonymous reviewers. We are also grateful to the President of GULP, Stefania Costantini, and to all the members of the GULP Board, for their support and their fruitful suggestions in the troubled times of the COVID-19 pandemic. Finally, special thanks are due to all the attendees that joined the conference in person or remotely for turning CILC 2021 into an occasion for lively discussions on relevant research topics and research challenges.

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Parma, Italy

Stefania Monica Federico Bergenti

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