

Proceedings of the 37th International Workshop on Description Logics

Edited by Laura Giordano | Jean Christoph Jung | Ana Ozaki

> June 18–21, 2024 | Bergen, Norway https://dl.kr.org

Vorkshop ISSN 1613-0073

# PREFACE

#### **DL** – The International Workshop on Description Logics

The International Workshop on Description Logics is the main annual event of the description logic research community. It is the forum at which those interested in description logics, from both academia and industry, meet to discuss ideas, share information, and compare experiences. The workshop explicitly welcomes submissions from researchers that are new to the area and provides quality feedback via peer-reviewing, while at the same time being of an inclusive nature with a very high acceptance rate. Inclusion of a paper in the informal (electronic) DL proceedings at CEUR should not preclude the work from later publication at conferences. Further information can be found on the DL web pages at http://dl.kr.org/.

This volume contains the papers presented at the 37th International Workshop on Description Logics (DL 2024), held between June 18 and 21, 2024, in Bergen, Norway. Every submission to the workshop received on average three reviews provided by 57 PC members and 3 additional external reviewers.

Overall, the committee decided to accept 11 full papers and 27 extended abstracts. The contents of these papers were presented in 27 oral presentations and 10 posters. The program additionally included three invited talks by Gabriele Kern-Isberner (TU Dortmund University), Ondrej Kuzelka (Czech Technical University Prague), and Camille Bourgaux (DI ENS, ENS, CNRS, PSL University & Inria). We thank all the PC members for their invaluable efforts in providing helpful and informative reviews for all submissions on time.

We want to thank the general chair, Ana Ozaki and her local organisation team consisting of Victor Lacerda and Matteo Magnini for all their efforts in preparing the event locally in Bergen, as well as our publicity co-chairs Victor Lacerda and Andrea Mazzullo for spreading the word. Our local sponsorhip chair Guohui Xiao helped us in securing funding to support more PhD students coming to the workshop. Of course, the workshop would not have been possible without the submissions and participation of all the people that make DL such a great community.

We are also very grateful to our sponsors, namely the Center for Perspicuous Computing, the Research Council of Norway, the Norwegian Artificial Intelligence Research Consortium, the Italian Association for Logic Programming, the European Association for Artificial Intelligence, the Center for Trustworthy Data Science and Security, the L. Meltzer Høyskolefond, and the Artificial Intelligence Journal for providing support and committing funds for the event. The list of sponsors, the detailed program, and further information for DL 2024 can be found at our event homepage at https://dl2024.w.uib.no/.

Laura Giordano | Jean Christoph Jung | Ana Ozaki

# **DL 2024 Organisation**

## 37th International Workshop on Description Logics

## General Chair

#### Ana Ozaki

University of Oslo, Norway

### **Programme Chairs**

Laura Giordano	Università del Piemonte Orientale, Italy
Jean Christoph Jung	TU Dortmund University, Germany

## Local Organization Team

Victor Lacerda	University of Bergen, Norway
Matteo Magnini	University of Bologna, Italy

# **Publicity Co-Chairs**

Victor Lacerda	University of Bergen, Norway
Andrea Mazzullo	University of Trento, Italy

#### **Programme Committee**

Alessandro Artale Franz Baader Bartosz Bednarczyk Meghyn Bienvenu Stefan Borgwardt Camille Bourgaux Diego Calvanese David Carral Giovanni Casini Jieying Chen Gianluca Cima Bernardo Cuenca Grau Oliver Fernandez Gil Laura Giordano Birte Glimm Martin Homola Yazmin A. Ibanez-Garcia Jean Christoph Jung Yevgeny Kazakov Stanislav Kikot Roman Kontchakov Patrick Koopmann Egor V. Kostylev Alisa Kovtunova Francesco Kriegel Markus Krötzsch Oliver Kutz Domenico Lembo Carsten Lutz Quentin Manière Andrea Mazzullo Thomas Meyer Barbara Morawska Filip Murlak Linh Anh Nguyen Ana Ozaki Fabio Papacchini Rafael Peñaloza Antonella Poggi Denis Ponomaryov Gianluca Pozzato Guendalina Righetti Sebastian Rudolph Vladislav Ryzhikov

Free University of Bolzano-Bozen Technische Universität Dresden Technische Universität Dresden & University of Wrocław University of Bordeaux Technische Universität Dresden CNRS, DI ENS Free University of Bozen-Bolzano LIRMM, Inria, University of Montpellier, CNRS ISTI - CNR University of Oslo Sapienza University of Rome University of Oxford Technische Universität Dresden DISIT, Università del Piemonte Orientale Universität Ulm Comenius University in Bratislava School of Informatics and Computer Science, Cardiff University TU Dortmund University The University of Ulm Birkbeck College Birkbeck, University of London Vrije Universiteit Amsterdam University of Oslo Technische Universität Dresden Technische Universität Dresden Technische Universität Dresden KRDB, Free University of Bozen-Bolzano Sapienza University of Rome Universität Leipzig Universität Leipzig Free University of Bozen-Bolzano University of Cape Town and CAIR University of Opole University of Warsaw Institute of Informatics, University of Warsaw University of Bergen & University of Oslo Lancaster University Leipzig University of Milano-Bicocca Sapienza University of Rome Ershov Institute of Informatics Systems, Novosibirsk State University University of Torino Free University of Bolzano Technische Universität Dresden Birkbeck, University of London

Stefan Schlobach Barış Sertkaya Viorica Sofronie-Stokkermans Umberto Straccia David Toman Nicolas Troquard Anni-Yasmin Turhan Ivan Varzinczak Przemysław Andrzej Wałega Grant Weddell Frank Wolter Guohui Xiao Michael Zakharyaschev Vrije Universiteit Amsterdam Frankfurt University of Applied Sciences University Koblenz-Landau ISTI-CNR University of Waterloo Gran Sasso Science Institute Paderborn University Univ. Artois and CNRS University of Oxford University of Oxford University of Waterloo University of Liverpool Department of Information Science and Media Studies, University of Bergen Birkbeck, University of London

#### **Additional Reviewers**

Michael Welt Filippo de Bortoli Moritz Illich

Alessandro Artale Victor Gutierrez-Basulto Martin Homola Patrick Koopmann Alisa Kovtunova Ana Ozaki Renate Schmidt TU Dresden Universität Ulm

Universität Ulm

### **Steering Committee**

University of Bozen-Bolzano Cardiff University University of Bratislava Vrije Universiteit Amsterdam TU Dresden University of Oslo University of Manchester

