Preface

Advances in Modal Logic (AiML) is an initiative founded in 1995 and aimed at presenting an up-to-date picture of the state of the art in modal logic and its many applications. It consists of a conference series together with volumes based on the conferences. The conference series is the main international forum at which research on all aspects of modal logic is presented. The first installment was held in 1996 in Berlin, Germany, and since then it has been organized biennially, with meetings in 1998 in Uppsala, Sweden; in 2000 in Leipzig, Germany (jointly with ICTL-2000); in 2002 in Toulouse, France; in 2004 in Manchester, UK; in 2006 in Noosa, Australia; in 2008 in Nancy, France; in 2010 in Moscow, Russia; in 2012 in Copenhagen, Denmark; in 2014 in Groningen, the Netherlands; and in 2016 in Budapest, Hungary; in 2018 in Bern, Switzerland. Information about AiML and related events, including conference proceedings, is available at the website `www.aiml.net`.

The thirteenth conference in the AiML series was was organized at the University of Helsinki, Finland, by Sara Negri (University of Genova and University of Helsinki) and Gabriel Sandu (University of Helsinki), with the assistance of Fausto Barbero, Annika Kanckos, Eugenio Orlandelli, and Edi Pavlović. Due to the exceptional situation caused by Covid 19, AiML 2020 was held online on August 24–28, 2020.

The conference website can be found at
`https://www.helsinki.fi/en/conferences/advances-in-modal-logic-2020`.

This volume contains abstracts of invited talks and contributed papers from the conference. The invited talks were given by

- Bahareh Afshari (University of Gothenburg and University of Amsterdam)
- Nick Bezhanishvili (University of Amsterdam)
- Melvin Fitting (City University of New York)
- Nina Gierasimczuk (Technical University of Denmark)

The Programme Committee received 56 regular paper submissions. Of these, 31 were selected for this volume by a reviewing process where every paper received three independent expert reviews.

The volume includes papers on propositional modal logics, their products, predicate modal logics, temporal and epistemic reasoning, modal logic with non-boolean basis, provability and interpretability logics, inquisitive, dynamic, connexive, intuitionistic, substructural, dependence logics and hybrid logics,

and other related logics. The topics include history of modal reasoning, decidability and complexity results, proof theory, model theory, interpolation, as well as other related problems in algebraic logic.

In addition, there were 29 submissions for short presentations at the conference, the great majority of them were accepted for presentation.

The members of the Programme Committee for the conference were

- Natasha Alechina (Utrecht University)
- Maria Aloni (University of Amsterdam)
- Philippe Balbiani (CNRS, IRIT Toulouse)
- Guram Bezhanishvili (New Mexico State University)
- Marta Bílková (Charles University Prague)
- Patrick Blackburn (University of Roskilde)
- Agata Ciabattoni (TU Wien)
- Giovanna Corsi (University of Bologna)
- Giovanna D'Agostino (University of Udine)
- Stéphane Demri (CNRS, LSV, ENS Paris-Saclay)
- Hans van Ditmarsch (CNRS, LORIA, University of Lorraine)
- David Fernández-Duque (Ghent University)
- David Gabelaia (TSE Razmadze Mathematical Institute)
- Didier Galmiche (CNRS, LORIA, University of Lorraine)
- Silvio Ghilardi (University of Milan)
- Valentin Goranko (Stockholm University)
- Rajeev Goré (The Australian National University)
- Davide Grossi (University of Groningen)
- Helle Hvid Hansen (Delft University of Technology)
- Wesley Holliday (UC Berkeley)
- Agi Kurucz (King's College London)
- Roman Kuznets (TU Wien)
- Carsten Lutz (University of Bremen)
- George Metcalfe (University of Bern)
- Larry Moss (Indiana University)
- Cláudia Nalon (University of Brasilia)
- Sara Negri (University of Genova and University of Helsinki)
- Eric Pacuit (University of Maryland)
- Xavier Parent (University of Luxembourg)
- Valeria De Paiva (Samsung Research America, Birmingham University)
- Sophie Pinchinat (IRISA, University of Rennes I)
- Mark Reynolds (The University of Western Australia)
- Renate Schmidt (University of Manchester)

- Ilya Shapirovsky (Institute for the Information Transmission Problems)
- Valentin Shehtman (Institute for the Information Transmission Problems)
- Thomas Studer (University of Bern)
- Sara L. Uckelman (Durham University)
- Yde Venema (University of Amsterdam)
- Yanjing Wang (Peking University)
- Michael Zakharyashev (Birbeck University of London)

The Programme Committee was chaired by

- Nicola Olivetti (Aix-Marseille University)
- Rineke Verbrugge (University of Groningen)

The Steering Committee of AiML for 2018–2020 consisted of

- Lev Beklemishev (Steklov Mathematical Institute)
- Guram Bezhanishvili (New Mexico State University)
- Rajeev Goré (Australian National University)
- Giovanna D'Agostino (University of Udine)
- Stéphane Demri (CNRS, France)
- Agi Kurucz (King's College London)
- Sara Negri (University of Genova and University of Helsinki) (local organizer of AiML 2020)
- Nicola Olivetti (Aix-Marseille University)
- Rineke Verbrugge (University of Groningen)

Many other people assisted with the reviewing process, including: Juan Aguilera, Michael Baur, Hugo Bazille, Nick Bezhanishvili, Torben Braüner, Luca Carai, Ivano Ciardelli, Tiziano Dalmonte, Anupam Das, Jeremy Dawson, Sebastian Enqvist, Luis Estrada-González, Saúl Fernández González, Melvin Fitting, Nissim Francez, Peter Fritz, Krisztina Fruzsa, Nikolaos Galatos, Rustam Galimullin, Francesco Antonio Genco, Marianna Girlando, Christopher Hampson, Joost Joosten, Max Kanovich, Stanislav Kikot, Antti Kuusisto, Stepan Kuznetsov, Ori Lahav, Martin Lange, Eveline Lehmann, Bjoern Lellmann, Mateusz Łełyk, Yanjun Li, Churn-Jung Liau, Tim Lyon, Tommaso Moraschini, Massimo Mugnai, Hoang Nga Nguyen, Eugenio Orlandelli, Fedor Pakhomov, Edi Pavlovic, Marcin Przybyłko, Gabriele Pulcini, Vít Punčochář, Ricardo Oscar Rodriguez, Daniel Rogozin, Mikhail Rybakov, Kiana Samadpour Motalebi, Luigi Santocanale, Nenad Savic, Giorgio Sbardolini, Julian Schlöder, François Schwarzentruber, Ian Shillito, Dmitry Shkatov, John Stell, Olim Tuyt, Heinrich Wansing, Xuefeng Wen, Evgeny Zolin. We apologize to anyone whose name was inadvertently left off this list.

June 24th, 2020

Nicola Olivetti
Rineke Verbrugge
Sara Negri
Gabriel Sandu