

ADVANCES IN MODAL LOGIC IX

COPENHAGEN, 22-25 AUGUST, 2012 <http://hylocore.ruc.dk/aiml2012>

Advances in Modal Logic is an initiative aimed at presenting the state of the art in modal logic and its various applications. The initiative consists of a conference series together with volumes based on the conferences. Information about the AiML series can be obtained at <http://www.aiml.net>. AiML-2012 is the ninth conference in the series.

TOPICS. We invite submission on all aspects of modal logic, including:

- history and philosophy of modal logic;
- applications of modal logic;
- computational aspects of modal logic (complexity and decidability of modal and temporal logics, modal and temporal logic programming, model checking, model generation, theorem proving for modal logics);
- theoretical aspects of modal logic (algebraic/categorical perspectives on modal logic, coalgebraic modal logic, completeness and canonicity, correspondence and duality theory, many-dimensional modal logics, modal fixed point logics, model theory of modal logic, proof theory of modal logic);
- specific instances and variations of modal logic (description logics, modal logics over non-boolean bases, dynamic logics and other process logics, epistemic and deontic logics, modal logics for agent-based systems, modal logic and game theory, modal logic and grammar formalisms, provability and interpretability logics, spatial and temporal logics, hybrid logic, intuitionistic logic, substructural logics, computationally light fragments).

Papers on related subjects will also be considered.

CONFERENCE LOCATION. Advances in Modal Logic 2012 will be held at the IDA conference center in downtown Copenhagen: <http://ida.dk/sites/moedecenter/english/Sider/EnglishForside.aspx> This is in walking distance from Copenhagen Central Station and many reasonably priced hotels.

PAPER SUBMISSIONS. There will be two types of submissions to AiML-2012: (1) Full papers for publication in the proceedings and presentation at the conference. (2) Abstracts for short presentation only. Both types of papers should be submitted electronically using the EasyChair submission page at <http://www.easychair.org/conferences/?conf=aiml2012>. At least one author of each accepted paper or abstract must register for, and attend, the conference to present his or her work.

- (1) **FULL PAPERS.** Authors are invited to submit, for presentation at the conference and publication in the proceedings, full papers reporting on original research and not submitted elsewhere. The proceedings of AiML'2012 will be published (in a volume to be made available at the conference) by College Publications <http://www.collegepublications.co.uk>. The submissions should be at most 15 pages, with an optional technical appendix of up to 5 pages, together with a plain-text abstract of 100-200 words. The submissions must be typeset in LaTeX, using a style file and template that will be provided on the AiML'2012 website.
- (2) **ABSTRACTS.** These should be at most 5 pages. They may describe preliminary results, work in progress etc., and will be subject to light reviewing. The accepted abstracts will be made available at the conference, and the authors will make short (up to 15 min) presentations on them.

SPECIAL SESSION ON HYBRID LOGIC. Hybrid logic is an extension of modal logic allowing to refer explicitly to states of the model in the syntax of formulas. There will be a special session of AiML devoted to papers on hybrid logic. The scope of the special session is standard hybrid-logical machinery like nominals, satisfaction operators, and the downarrow binder, but also other extensions of modal logic can be considered. Papers for this session should be submitted the same way as others.

SPECIAL SESSION IN HONOUR OF LARISA MAKSIMOVA. There will also be a special session of AiML devoted to papers and talks in honour of Larisa Maksimova, in recognition of her many outstanding contributions to modal logic.

SPECIAL SESSION ON MODALITES FOR TYPES. Recent years have witnessed significant growth of interest in constructive type-theoretical modalities, in particular modalities ensuring productivity and type safety of (co-)recursive definitions in reactive programming. Some

earlier examples include the use of modalities for staged computation, metaprogramming or in computational lambda-calculus. In order to boost interaction between programming, type-theoretical and modal communities, AiML 2012 will host a special session on these topics. Papers for this session should be submitted to the EasyChair site along with others.

INVITED SPEAKERS

Lev Beklemishev (Moscow State University)
Johan van Benthem (University of Amsterdam and Stanford University)
Lars Birkedal (IT University of Copenhagen, Denmark)
Patrick Blackburn (Roskilde University)
Balder ten Cate (UC Santa Cruz)
Larisa Maksimova (Novosibirsk State University)

PROGRAMME COMMITTEE

Carlos Areces (FaMAF, Univ. Nac. de Cordoba, Argentina)
Philippe Balbiani (IRIT, Toulouse, France)
Lev Beklemishev (Moscow State University, Russia)
Guram Bezhanishvili (New Mexico State University, USA)
Nick Bezhanishvili (Imperial College London, UK)
Patrick Blackburn (Roskilde University, Denmark)
Thomas Bolander (Technical University of Denmark)
Torben Braüner (Roskilde University, Denmark)
Giovanna Corsi (Università di Bologna, Italy)
Giovanna D'Agostino (Università di Udine, Italy)
Stephane Demri (LSV, ENS Cachan, France)
Melvin Fitting (Lehman College, CUNY, USA)
Silvio Ghilardi (Università di Milano, Italy)
Robert Goldblatt (Victoria Univ. of Wellington, New Zealand)
Valentin Goranko (Technical University of Denmark)
Rajeev Gore (Australian National University, Australia)
Andreas Herzig (IRIT, Toulouse, France)
Ian Hodkinson (Imperial College London, UK)
Wiebe van der Hoek (University of Liverpool, UK)
Alexander Kurz (University of Leicester, UK)
Tadeusz Litak (University of Leicester, UK)
Lawrence Moss (Indiana University, USA)
Hiroakira Ono (Japan Adv. Inst. of Science and Technology)
Martin Otto (Technical University of Darmstadt, Germany)
Alessandra Palmigiano (ILLC, Univ. of Amsterdam, The Netherlands)
Renate Schmidt (University of Manchester, UK)
Lutz Schröder (DFKI GmbH & Univ. of Bremen, Germany)
Valentin Shehtman (Moscow State University, Russia)
Dimiter Vakarelov (Sofia University, Bulgaria)
Yde Venema (ILLC, Univ. of Amsterdam, The Netherlands)
Heinrich Wansing (Ruhr University Bochum, Germany)
Frank Wolter (University of Liverpool, UK)
Michael Zakharyashev (Birkbeck College, London, UK)

PROGRAMME COMMITTEE CO-CHAIRS

Silvio Ghilardi (Università degli Studi di Milano, Italy)
Lawrence Moss (Indiana University, USA)

ORGANIZING COMMITTEE CO-CHAIRS

Thomas Bolander (Technical University of Denmark)
Torben Braüner (Roskilde University, Denmark)

IMPORTANT DATES

Full papers submission deadline: 30 March 2012
Full papers acceptance notification: 18 May 2012
Abstracts submission deadline: 1 June, 2012
Abstracts acceptance notification: 7 June, 2012
Final version of full papers and abstracts due: 15 June 2012
Conference: 22-25 August, 2012.

FURTHER INFORMATION. See the AiML 2012 website hylocore.ruc.dk/aiml2012

ENQUIRIES. E-mail enquiries should be directed respectively to the PC co-chairs, sent to aiml2012@easychair.org