

Preface

LCMAS 2005, the third international workshop on Logic and Communication in Multi-Agent Systems, was held on the 1st of August, 2005 at the University of Edinburgh as a preconference workshop of IJCAI 2005, the 19th International Joint Conference on Artificial Intelligence. The one day program consisted of two invited lectures and two sessions of technical contributions and discussion. These proceedings contain the technical papers, that were revised based on the feedback of a reviewing process and discussions during the workshop.

The LCMAS workshop series aims at bringing together researchers interested in topics related to the development and use of formal tools when applied to modeling, specifying, verifying, and reasoning about multi-agent systems in which communication and updating play a crucial role. Therefore, the workshop wants to provide a forum for discussing technical issues that arise in formalisms (epistemic, temporal, dynamic and authentication logics and tools) inspired by the needs of modeling information exchanges in multi-agent systems. The papers contained in this volume illustrate various approaches of dealing with interpretation and proliferation of information in multi-agent systems.

The program committee for LCMAS 2005 consisted of Johan van Benthem (University of Amsterdam), Marco Colombetti (Politecnico di Milano), Jürgen Dix (University of Clausthal) Rogier van Eijk (University of Utrecht), Andrew Jones (King's College London), Dusko Pavlovic (Kestrel Institute), Wojciech Penczek (Warsaw University), Riccardo Pucella (Cornell University), Pierre-Yves Schobbens (University of Namur), Holger Schlingloff (Bremen Institute for Secure Systems), Marek Sergot (Imperial College London) and Luca Viganò (ETH Zurich). Additional reviewing was carried out by the organisers.

Invited lectures were given by Julian Bradfield (University of Edinburgh) entitled *Independence-Friendly Modal and Temporal Logics* on the interconnection of IF-logic and multi-agent systems and by Carsten Lutz (Dresden University of Technology) entitled *The Complexity of Public Announcement Logic* on polynomial satisfiability-preserving translation from public announcement logic to epistemic logic with common knowledge.

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Wiebe van der Hoek, Alessio Lomuscio, Erik de Vink and Mike Wooldridge

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(workshop organizers)