CLIMA VI

Sixth International Workshop on Computational Logic in Multi-Agent Systems

City University, London, UK, June 27-29, 2005

`http://clima.deis.unibo.it/`

SUBMISSIONS OPEN UNTIL APRIL 15, 2005

CLIMA VI is the latest in a series of international events on Multi-Agent Systems (MAS) and Computational Logic (CL). The previous events were held in Las Cruces, NM (1999), under the name Workshop on Multi-Agent Systems in Logic Programming, London, UK (2000) Paphos, Cyprus (2001), Copenhagen, Denmark (2002), Fort Lauderdale, FL, (2004), and Lisbon, Portugal (2004). Selected papers from previous editions have been published in special issues of international journals like ENTCS vol. 70(5) and AMAI vol. 37(1-2) and vol. 42(1-3), and more recently in the Springer-Verlag LNAI series (vol. 3259 and 3487).

Aims and Scope MAS are communities of problem-solving entities that can perceive and act upon their environments to achieve their individual goals as well as joint goals. The work on such systems integrates many technologies and concepts in artificial intelligence and other areas of computing as well as other disciplines.

CL provides a well-defined, general, and rigorous framework for studying syntax, semantics and procedures for individual agents and multi-agent systems, for attending implementations, environments, tools, and standards, and for linking together specification and verification of properties.

In particular, the purposes of this CLIMA are:

(1) to *present state-of-the-art research*, based on CL, aimed at representing, programming and reasoning about agents and MAS in a formal way,

(2) to *further promote* CL in MAS and disseminate recent advances in the area to researchers and students, and

(3) to *discuss and confront* techniques and approaches to CL/MAS-based problem modelling and solving in an informal and inspiring environment.

To this end, the organization of CLIMA VI will provide **scholarships** to students who wish to attend, and will offer a number of **tutorials** on several aspects of CL-based MAS modelling and programming. CLIMA VI will also host the **First CLIMA Competition**, organized by Jürgen Dix and Mehdi Dastani.

Topics Relevant topics include, but are not limited to:

- logical foundations of multi-agent systems
- knowledge and belief representation and updates
- hypothetical reasoning and learning
- extensions of logic programming for multi-agent systems
- non-monotonic reasoning in multi-agent systems
- argumentation for agent reasoning and interaction
- operational semantics and execution agent models
- model checking algorithms, tools, and applications
- semantics of interaction and communication languages
- distributed constraint satisfaction in multi-agent systems
- temporal reasoning for multi-agent systems
- modal logic approaches to multi-agent systems
- logic-based programming languages
- distributed theorem proving for multi-agent systems
- logic-based implementations of multi-agent systems
- decision theory for multi-agent systems
- specification and verification of formal properties

Submissions We welcome and encourage the submission of high quality, original papers, which are not simultaneously submitted for publication elsewhere.

Papers should clearly state the relevance of the presented work to both CL and MAS research. Major acceptance criteria will be novelty, significance, and technical soundness.

Papers should be written in English, formatted according to the Springer LNCS style, and not exceed 16 pages including figures, references, etc.

Important Dates

◇ **Submission: April 15, 2005**

♡ Notification: May 13, 2005

♣ Camera-Ready: June 3, 2005

♠ CLIMA VI: June 27-29, 2005

Details and deadlines regarding competition and scholarship applications will become available from the CLIMA VI web site.

Proceedings Post-proceedings of the workshop are likely to be published within the Springer-Verlag LNAI series. A printed volume with the proceedings will be available at the workshop.

Organising committee

Workshop Chairs
    Francesca Toni, Imperial College London, UK
    Paolo Torroni, University of Bologna, Italy

Competition Chairs
    Jürgen Dix, Technical University of Clausthal, Germany
    Mehdi Dastani, Utrecht University, The Netherlands

Local Organisation Chair
    Kostas Stathis, City University London, UK

Programme committee

José Júlio Alfers, New University of Lisbon, Portugal
Rafael H. Bordini, University of Durham, UK
Gerhard Brewka, University of Leipzig, Germany
Jürgen Dix, Technical University of Clausthal, Germany
Thomas Eiter, Vienna University of Technology, Austria
Klaus Fischer, DFKI, Germany
Michael Fisher, The University of Liverpool, UK
James Harland, RMIT, Australia
Katsumi Inoue, National Institute of Informatics, Japan
Antonis Kakas, University of Cyprus
Evelina Lamma, University of Ferrara, Italy
João Leite, New University of Lisbon, Portugal
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John Jules Ch. Meyer, Utrecht University, The Netherlands
Leora Morgenstern, IBM T.J. Watson Research Center, USA
Wojciech Penczek, Polish Academy of Sciences, Poland
Jeremy Pitt, Imperial College London, UK
Enrico Pontelli, New Mexico State University, USA
Fariba Sadri, Imperial College London, UK
Ken Satoh, National Institute of Informatics, Japan
Renate Schmidt, University of Manchester, UK
Trao Can Son, New Mexico State University, USA
Kostas Stathis, City University London, UK
Wiebe van der Hoek, The University of Liverpool, UK
Cees Witteveen, Delft Univ. of Technology, The Netherlands