

Contents lists available at [ScienceDirect](http://www.sciencedirect.com)

# Information and Computation

journal homepage: [www.elsevier.com/locate/ic](http://www.elsevier.com/locate/ic)

## Preface

# Logic, language, information and computation

## WoLLIC'07

This special issue of Information and Computation consists of a selection of papers presented at the Fourteenth WoLLIC meeting, which was held in Rio de Janeiro, Brazil, from July 2 to July 5, 2007. Three of these papers are by invited speakers, and nine are revised versions of papers included in the WoLLIC'07 Proceedings (Springer LNCS 4576), themselves revised and expanded from the papers submitted to the Workshop Program Committee. Thus, the latter have undergone three refereeing cycles.

The Workshop on Logic, Language, Information and Computation (WoLLIC) is an annual international forum on interdisciplinary research involving formal logic, computing and programming theory, and natural language and reasoning. The WoLLIC meetings alternate between Brazil (and Latin America) and other countries, with the aim of fostering interest in Applied Logic among Latin American scientists and students, and facilitating their interaction with the international Applied Logic community.

WoLLIC'07 focused on foundations of computing and programming, novel computation models and paradigms, broad notions of proof and belief, formal methods in software and hardware development; logical approach to natural language and reasoning; logics of programs, actions and resources; foundational aspects of information organization, search, flow, sharing, and protection. The Program Committee for this meeting, consisting of the 28 colleagues listed below, was designed to promote these inter-disciplinary and cross-disciplinary topics.

Like its predecessors, WoLLIC'07 includes invited talks and tutorials as well as contributed papers. The Program Committee received 52 complete submissions (aside from 15 preliminary abstracts which did not materialize). A thorough review process by the Program Committee, assisted by over 70 external reviewers, has led to the acceptance of 21 papers for presentation at the meeting and inclusion in these Proceedings. The conference program also included 16 talks and tutorials by 10 prominent invited speakers, who have graciously accepted the Program Committee's invitation.

We are sincerely grateful to the many people who enabled the meeting and made it a success: the Program Committee members, for their dedication and hard work over extended periods; the invited speakers, for their time and efforts; the contributors, for submitting excellent work and laboriously refining their papers for the Proceedings; the external reviewers, who graciously agreed to selflessly comment on submitted papers, often providing detailed and highly valuable feedback; and the Organizing Committee, whose work over many months have made the meeting possible in the first place.

On behalf of the entire WoLLIC community, we would also like to express our gratitude to our institutional sponsors and supporters. WoLLIC'07 was sponsored by the Association for Symbolic Logic (ASL), the Interest Group in Pure and Applied Logics (IGPL), the European Association for Logic, Language and Information (FoLLI), the European Association for Theoretical Computer Science (EATCS), the Sociedade Brasileira de Computacao (SBC), and the Sociedade Brasileira de Logica (SBL). Generous financial support was provided by the Brazilian Government (through CAPES, Grant PAEP-0755/06-0), Univ. Fed. Fluminense (UFF), and SBC.

## Program Committee

Samson Abramsky (Oxford)  
 Michael Benedikt (Bell Labs and Oxford)  
 Lars Birkedal (ITU Copenhagen)  
 Andreas Blass (U Michigan)  
 Thierry Coquand (Chalmers U, Goteborg)  
 Jan van Eijck (CWI, Amsterdam)

Marcelo Finger (U Sao Paulo)  
Rob Goldblatt (Victoria U, Wellington)  
Yuri Gurevich (Microsoft Redmond)  
Hermann Haeusler (PUC Rio)  
Masami Hagiya (Tokyo U)  
Joseph Halpern (Cornell)  
John Harrison (Intel UK)  
Wilfrid Hodges (U London/QMW)  
Phokion Kolaitis (IBM San Jose)  
Marta Kwiatkowska (U Birmingham and Oxford)  
Daniel Leivant (Indiana U) (Chair)  
Maurizio Lenzerini (U Rome)  
Jean-Yves Marion (LORIA Nancy)  
Dale Miller (Polytechnique, Paris)  
John Mitchell (Stanford U)  
Lawrence Moss (Indiana U)  
Peter O'Hearn (U London/QM)  
Prakash Panangaden (McGill, Montreal)  
Christine Paulin-Mohring (Paris-Sud, Orsay)  
Alexander Razborov (Moscow U)  
Helmut Schwichtenberg (Munich U)  
Jouko Vaananen (U Helsinki)

Daniel Leivant\*  
Indiana University,  
Computer Science Department,  
IN 47405, Bloomington,  
United States

\* Fax: +812 855 4829.

E-mail address: [leivant@cs.indiana.edu](mailto:leivant@cs.indiana.edu) (D. Leivant).

Ruy de Queiroz  
Federal University of Pernambuco,  
Brazil.