CALL FOR PAPERS

5th International Workshop on Logical Frameworks and Meta-Languages: Theory and Practice (LFMTP 2010)

July 14, 2010, Edinburgh, Scotland, UK

http://lfmtp10.dimi.uniud.it

Affiliated with Logic in Computer Science (LICS 2010), July 11-14, 2010

Important Dates:
Submission (abstracts): April 1, 2010
Submission (papers): April 4, 2010
Author notification: May 1, 2010
Pre-proceedings versions: May 14, 2010
Workshop: July 14, 2010
Post-proceedings versions: August 14, 2010

Program Committee:
Stefan Berghofer (TU Munich)
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Carsten Schürmann (IT University of Copenhagen)

Organizers:
Karl Crary
8127 Wean Hall
School of Computer Science
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15213 (USA)
Email: crary@cs.cmu.edu

Marino Miculan
Department of Mathematics
and Computer Science
University of Udine
Via delle Scienze 206
33100 Udine (Italy)
Email: miculan@dimi.uniud.it

The LFMTP workshop continues the series of workshops on Logical Frameworks and Meta-Languages (LFM) and the workshops on Mechanized Reasoning about Languages with Variable Binding (MERAIN).

Logical frameworks and meta-languages form a common substrate for representing, implementing, and reasoning about a wide variety of deductive systems of interest in logic and computer science. Their design and implementation on the one hand and their applications in for example proof-carrying code have been the focus of considerable research over the last two decades. This workshop will bring together designers, implementors, and practitioners to discuss all aspects of logical frameworks and variable binding.

The broad subject areas of LFMTP are:

- The automation and implementation of the meta-theory of programming languages and related calculi, particularly work which involves variable binding and fresh name generation.
- The theoretical and practical issues concerning the encoding of variable binding and fresh name generation, especially the representation of, and reasoning about, datatypes defined from binding signatures.
- Case studies of meta-programming, and the mechanization of the (meta)theory of descriptions of programming languages and other calculi. Papers focusing on logic translations and on experiences with encoding programming languages theory are particularly welcome.

Topics include, but are not limited to,

- logical framework design
- meta-theoretic analysis
- applications and comparative studies
- implementation techniques
- efficient proof representation and validation
- proof-generating decision procedures and theorem provers
- proof-carrying code
- substructural frameworks
- semantic foundations
- methods for reasoning about logics
- formal digital libraries

Submission of papers is electronic. Authors must submit the paper through the EasyChair server, at http://www.easychair.org/conferences/?conf=lfmtp10 Authors are required to submit a paper title and a short abstract before submitting the paper (see important dates aside). Accepted papers will be presented at the workshop and included in the preliminary proceedings, which will be made available in electronic form.

After the workshop, authors of accepted papers will be invited to submit revised versions for inclusion in final post-proceedings, which will be published in the Electronic Proceedings in Theoretical Computer Science (EPTCS) http://eptcs.org.

Papers are to be submitted in PDF format, should not exceed 15 pages including references, and must be prepared in LATEX using the EPTCS macro package http://style.eptcs.org. For further information and submission instructions, see the LFMTP 2010 web page.