## CALL FOR PAPERS

## International Workshop on

# Logical Frameworks and Meta-Languages: Theory and Practice (LFMTP 2011)

August 27, 2011, Nijmegen, The Netherlands

http://lfmtp11.cs.umn.edu/

Affiliated with Interactive Theorem Proving (ITP 2011), August 22–25, 2011

#### **Important Dates:**

Submission (abstracts): May 16, 2011
Submission (papers): May 23, 2011
Author notification: June 22, 2011
Final versions due: August 1, 2011
Workshop: August 27, 2011

## **Program Committee:**

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Gopalan Nadathur Department of Computer Science and Engineering University of Minnesota Minneapolis, MN 55455, USA Email: gopalan@cs.umn.edu 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 (MER $\lambda$ IN).

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 use in reasoning tasks ranging from the correctness of software to the properties of formal computational systems on the other hand have been the focus of considerable research over the last two decades. This workshop will bring together designers, implementors, and practitioners to discuss various aspects impinging on the structure and utility of logical frameworks, including the treatment of variable binding, inductive and co-inductive reasoning techniques and the expressivity and lucidity of the reasoning process.

The broad subject areas of LFMTP'11 are:

- Encoding and reasoning about the meta-theory of programming languages and related formally specified systems.
- Theoretical and practical issues concerning the treatment of variable binding, especially the representation of, and reasoning about, datatypes defined from binding signatures.
- Logical treatments of inductive and co-inductive definitions and associated reasoning techniques.
- 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 and must be completed through the EasyChair server that can be accessed through the workshop web site. The actual paper submission must be preceded by the submission of a title and a short abstract—see the important dates indicated alongside. Submissions to the workshop can take several forms, such as system descriptions, short accounts of work in progress, and detailed, technical presentations of new results. Different categories of submissions will be judged differently, the main common criteria being the content of the ideas and their ability to stimulate discussions at the workshop. Submissions must be in PDF format prepared in LaTeX using the EPTCS macro package (http://style.eptcs.org) and must not exceed 15 pages including references.

Accepted papers are expected to be presented at the workshop by their authors. Revised versions of these papers will be included in the proceedings that will be published as an Electronic Proceedings in Theoretical Computer Science (EPTCS) via http://eptcs.org.

For further information and submission instructions, see the LFMTP 2011 web page.