

# CICLOPS-WLPE 2014: CALL FOR PAPERS

CICLOPS-WLPE 2014 – International Joint Workshop on Implementation of Constraint and Logic Programming Systems and Logic-based Methods in Programming Environments 2014

July 17-18, 2014 · Vienna, Austria

<http://vsl2014.at/ciclops-wlpe/>

## Important Dates

Abstract Submission	April 7, 2014
Paper Submission	April 14, 2014
Author Notification	May 12, 2014
Camera-ready	May 26, 2014

## Aims and Scope

Software plays a crucial role in modern society. While the continuous advent of faster, smaller and more powerful computing devices makes the development of new and interesting applications feasible, it puts even more demands on the software developer. Indeed, while software keeps on growing in size and complexity, it is more than ever required to be delivered on time, free of error and to meet the most stringent efficiency requirements. Consequently, it is widely recognized that there is a need for methods and tools that support the programmer in every aspect of the software development process.

Having logic as the underlying formalism means that logic-based analysis techniques are often successfully used for program verification and optimization. Emerging programming paradigms and growing complexity of the properties to be verified pose new challenges for the community, while emerging reasoning techniques can be exploited.

The International Colloquium on Implementation of Constraint and LOGic Programming Systems (CICLOPS) provides a forum to discuss the design, implementation, and optimization of logic, constraint (logic) programming systems, and other systems based on logic as a means of expressing computations. Experience backed up by *real implementations and their evaluation* is given preference, as well as descriptions of work in progress in that direction.

The aim of the Workshop on Logic-based methods in Programming Environments (WLPE) is to provide an informal meeting for researchers working on logic-based methods and tools that *support program development and analysis*. As in recent years, these

topics include not only environmental tools for logic programming, but increasingly also logic-based environmental tools for programming in general and frameworks and resources for sharing in the logic programming community.

The combination of these two areas of interest in this year's joint workshop provides a forum to discuss together the states of the art for using logic both in the evaluation of programs and in meta-reasoning about programs.

Areas particularly relevant to the joint workshop include (but are not limited to):

- implementation schemes
- concurrent and distributed logic and constraint programming systems
- dynamic compilation
- memory management and garbage collection
- indexing techniques and optimizations for large size programs
- embedding of logic and constraint programming engines in multi-paradigm systems
- alternative logic engines and inference mechanisms (ASP, SAT, QSAT, DL, etc.)
- theorem provers
- proof assistants
- logic-based natural language processing systems
- design and implementation of declarative I/O concepts
- static and dynamic analysis
- debugging and testing
- program verification and validation
- code generation from specifications
- termination analysis
- reasoning on occurs-check freeness and determinacy
- profiling and performance analysis
- type and mode analysis
- shape, points-to and escape analysis
- module systems
- optimization tools
- program understanding
- refactoring
- logical meta-languages

Due to the strong overlap between the CICLOPS-WLPE community and several FLoC communities (in particular logic (programming), verification, automated reasoning, rewriting techniques, and SAT solving), the workshop is affiliated to several conferences:

- 30th International Conference on Logic Programming (ICLP)
- 26th International Conference on Computer Aided Verification (CAV)
- 7th International Joint Conference on Automated Reasoning (IJCAR)
- Joint meeting of the 23rd EACSL Annual Conference on Computer Science Logic (CSL) and the 9th ACM/IEEE Symposium on Logic in Computer Science (LICS)
- 25th International Conference on Rewriting Techniques and Applications (RTA) joined with the 12th International Conference on Typed Lambda Calculi and Applications (TLCA)
- 17th International Conference on Theory and Applications of Satisfiability Testing (SAT)

## Paper Submissions

The workshop will welcome all papers that are technically sound and on-topic, including contributions to theory, reports of interesting applications or work in progress, experience papers, suggestions for new challenging problems, system descriptions, comparison and discussion papers, and improvements to known results/proofs/implementations.

A program committee consisting of members from different research groups in the area will review the submissions on EasyChair. Papers will be reviewed by at least two, and usually three, referees. While we expect to accept all papers that are technically sound and on-topic, if the number of submissions is significantly higher than expected, the program committee will perform a selection to ensure the feasibility of the program.

All papers must be written in English and should not exceed 15 pages. We welcome also shorter submissions, e.g., extended abstracts and short papers, of at least 3 pages. For all accepted papers, at least one author is required to attend the workshop and give a presentation of 30 minutes including discussion.

Submissions must be made in Springer's LNCS format via the page:

<https://www.easychair.org/conferences/?conf=ciclopswlp2014>

We will use the opportunity of the FLoC USB proceedings to distribute the proceedings among the participants. Furthermore, the informal proceedings will be made available electronically as an RWTH Aachen University Technical Report (AIB). We will additionally use the Computing Research Repository (CoRR) for the workshop proceedings. In case of a sufficient number of high-quality submissions, selected papers may be suggested for a special issue of a journal (provided agreement of the authors).

## Program Committee

- Michael Codish (Ben-Gurion University)
- Daniel De Schreye (KU Leuven)
- Carsten Fuhs (University College London)
- John Gallagher (Roskilde University)
- Marco Gavanelli (University of Ferrara)
- Michael Hanus (CAU Kiel)
- Gerda Janssens (Katholieke Universiteit Leuven)
- Yoshitaka Kameya (Meijo University)
- Matthias Knorr (CENTRIA, Universidade Nova de Lisboa)
- Jael Kriener (University of Kent)
- Joachim Schimpf (Coninfer Ltd)
- Peter Schneider-Kamp (University of Southern Denmark)
- Tobias Schubert (Albert-Ludwigs-University Freiburg)
- Thomas Ströder (RWTH Aachen)
- Terrance Swift (Universidade Nova de Lisboa)
- Christian Theil Have (Novo Nordisk Foundation Center for Basic Metabolic research)
- German Vidal (MiST, DSIC, Universitat Politècnica de Valencia)
- Jan Wielemaker (VU University Amsterdam)

## Contact

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