

Proof, Structure, and Computation 2014
CSL-LICS Workshop
July 17-18, 2014, Vienna, Austria
<http://vsl2014.at/psc/>

=== Highlights ===

- PSC welcomes submissions of short abstracts: 1-2 pages in LNCS format
- Invited speakers: Ulrich Berger and Martin Escardo
- Post-proceedings are planned for a journal special issue

=== Important Dates ===

1 May 2014..... Abstract submission
16 May 2014..... Notification to authors
16 June 2014..... Camera-ready abstracts for electronic proceedings
17-18 July 2014..... PSC in Vienna

=== Scope ===

The extraction of computational content from proofs has a long tradition in logic, but usually depends on a concrete encoding that allows us to turn proofs into algorithms. A recent trend in this field is the departure from such encoding which not only makes it simpler to represent the mathematical content, but also makes the extracted computational content encoding independent. This shift in focus allows us to focus on what is relevant: the computational aspects of proofs and the specification (not representation) of the structures involved. We now have growing evidence that this move from representations (e.g. the signed digit representation of the reals) to axioms (e.g. of the real numbers) is possible. This development largely parallels the step from assembler to high level languages in programming.

As a by-product this move has already opened up the possibility to gain computational information from axiomatic proofs in more abstract and genuinely structural areas of mathematics such as algebra and topology.

=== Invited Speakers ===

Ulrich Berger (Swansea University, UK)
Martin Escardo (University of Birmingham, UK)

=== Submissions ===

We welcome 1-2-page abstracts presenting (finished, ongoing, or if clearly stated even

published) work on proof, structure, and computation. Particular topics of interest are

- Proof Theory
- Program Extraction
- Constructive Mathematics
- Topology and Computation
- Realisability Semantics
- Coalgebra and Computation
- Categorical Models
- Domain Theory
- Interval Analysis

=== Submission Guidelines ===

Abstracts are invited of ongoing, finished, or (if clearly stated) even published work on a topic relevant to the workshop.

The abstracts will appear in electronic pre-proceedings that will be distributed at the meeting.

Abstracts (at most 2 pages, in LNCS style) are to be submitted electronically in PDF via EasyChair (<http://www.easychair.org/conferences/?conf=psc2014>).

Accepted communications must be presented at the workshop by one of the authors.

=== Special Issue ===

We plan to invite extended versions of selected abstract with original work to post-proceedings in a journal special issue. They will be peer-reviewed according to the standard journal policy.

=== Program Committee ===

Neil Ghani (University of Strathclyde, UK)

Helle Hvid Hansen (Radboud University Nijmegen, NL)

Rosalie Iemhoff (Utrecht University, NL)

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Peter Schuster (University of Leeds, UK), PC chair

Alex Simpson (University of Edinburgh, UK)

Ana Sokolova (University of Salzburg, Austria), PC chair

=== Organizing Committee ===

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=== Contact ===

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