

Call for Participation:  
Summer School on Logic and Theorem Proving  
in Programming Languages  
July 22–30, 2008  
University of Oregon (Eugene, Oregon)  
<http://www.cs.uoregon.edu/research/summerschool/summer08/>  
[summerschool@cs.uoregon.edu](mailto:summerschool@cs.uoregon.edu)

This Summer School will cover current research focused on integrating expressive logical systems and powerful theorem-proving assistants into the design, definition, and implementation of programming languages. Speakers will present material covering foundational theory, advanced techniques, and applications.

Material will be presented at a tutorial level that will help graduate students and researchers from academia or industry understand the critical issues and open problems confronting the field. The course is open to anyone interested. Prerequisites are an elementary knowledge of logic and mathematics that is usually covered in undergraduate classes on discrete mathematics. Some knowledge of programming languages at the level provided by an undergraduate survey course will also be expected. Our primary target group is PhD students. We also expect attendance by faculty members who would like to conduct research on this topic or introduce new courses at their universities.

The program consists of more than twenty-five, 80 minute lectures presented by internationally recognized leaders in programming languages and formal reasoning research. Topics include:

**SMT Solvers - Theory, Implementation and Applications**

Leonardo de Moura, *Microsoft Research*

**Mechanization of Metatheory using LF and Twelf**

Robert Harper, *Carnegie Mellon University*

**Compiler Construction in Formal Logical Frameworks**

Jason Hickey, *California Institute of Technology*

**Specification and Verification of Programs with Pointers**

Rustan Leino, *Microsoft Research*

**Leveraging Domain-Specific Languages for Reasoning**

Sorin Lerner, *University of California – San Diego*

**Reasoning About Programs with ACL2**

Pete Manolios, *Northeastern University*

**Putting the Curry-Howard Isomorphism to Work**

Tim Sheard, *Portland State University*

**Nominal Techniques**

Christian Urban, *TU Munich*

**Coq for Programming Language Metatheory**

Stephanie Weirich, *University of Pennsylvania*

## Venue

The summer school will be held at the University of Oregon, located in the southern Willamette Valley city of Eugene, close to some of the world's most spectacular beaches, mountains, lakes and forests. On Sunday, July 27, students will have the option of participating in a group activity in Oregon's countryside.

## Registration

The cost for registration is \$175.00 (USD) for graduate students, and \$275.00 (USD) for other participants. Registration must be paid upon acceptance to the summer school, and is **non-refundable**. There are a limited number of grants available to fund part of the cost of student participation. If you are a graduate student and want to apply for grant money to cover your expenses, please also include a statement of your needs with your registration.

Additional information about the program, registration, venue, and housing options is available on the web site. Or, you may request more information by email.

To register for the Summer School, send a CV that includes a short description of your educational background and one letter of reference, unless you have already been granted a Ph.D. Please include your name, address and current academic status.

Send all registration materials to [summerschool@cs.uoregon.edu](mailto:summerschool@cs.uoregon.edu).

All registration materials should be delivered to the program by April 11, 2008. Materials received after the closing date will be evaluated on a space available basis. Non U.S. citizens should begin immediately to obtain travel documents.

## Housing

The school will provide on-campus housing and meals. To share a room with another student attending the school, the cost is \$495 (USD) per person. Housing rates are based on check-in Tuesday, July 22 and check-out before noon on Thursday, July 31. Some single rooms may be available for an additional fee of \$150 (USD). If you'd like a single room, please indicate your choice and we will try to accommodate you on a first-come/first-served basis.

## Organizers

**Organizing committee:** Matthew Fluet and Yannis Smaragdakis

**Sponsors:** National Science Foundation, ACM SIGPLAN, Microsoft Research