

Call for Participation:
Summer School on the Theory and Practice of
Language Implementation
July 23–31, 2009

University of Oregon (Eugene, Oregon)

<http://www.cs.uoregon.edu/research/summerschool/summer09/>

summerschool@cs.uoregon.edu

This Summer School will cover current research focused on the theory and practice of programming language implementation. 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 knowledge of programming language implementation (at the level usually covered in undergraduate classes on programming languages or compilers) as well as general knowledge of programming languages at the level provided by an undergraduate survey course. 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:

Garbage Collection and the Metronome GC

David Bacon, *IBM Research*

Algorithmic Program Synthesis

Ras Bodik, *University of California – Berkeley*

Abstract Interpretation

Patrick Cousot, *Ecole Normale Supérieure / New York University*

Continuations to Go

Olivier Danvy, *Aarhus University*

Program Analysis for Computing Symbolic Complexity Bounds

Sumit Gulwani, *Microsoft Research*

Managed Runtime Environments: Implementations and Opportunities

Chandra Krintz, *University of California – Santa Barbara*

Pointer Analysis

Ondrej Lhotak, *University of Waterloo*

Control-flow Analysis of Higher-Order Languages

Matt Might, *University of Utah*

Multi-Threaded Programming and Transactional Memory

Yannis Smaragdakis, *University of Massachusetts, Amherst*

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 26, 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.

All registration materials should be delivered to the program by April 17, 2009. 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 \$510 (USD) per person. Housing rates are based on check-in on Wednesday, July 22, and check-out before noon on Saturday, August 1. 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