Message from the Workshop Chairs

The need for hardware/software codesign techniques is being driven by numerous factors, including shrinking time-to-market constraints, the migration of programmable software processors and hardware processors (as well as other functions such as analog) onto a single chip, the blurring of the distinction between programmable and custom processors, and the increasing gap between silicon capacity and designer productivity. The response by the research community has been strong, as evidenced by the continued growth of the CODES workshop, representing the major international forum for presentation of the latest research and practice in codesign.

A record 98 papers were submitted this year. These underwent a thorough peer review process, resulting in 21 papers accepted for regular presentation (one of which chose not to publish in the proceedings) and 20 papers accepted for short presentation, for a total of 40 papers in these proceedings. Each paper is presented at the workshop as a (regular or short) talk, followed by an interactive poster session. The workshop program also includes two invited talks from leading industry representatives, and several group discussions on important topics facing the codesign community.

Topics covered by this year’s papers include new design models and methodologies to support codesign, techniques for building application-specific instruction-set processors, methods for improved hardware/software co-simulation, timing analysis techniques for hardware/software systems, issues in software generation, as well as methods for scheduling, partitioning and synthesizing processes onto processors.

This year’s proceedings will be available as hardcopy, on CD-ROM on the ACM SIGDA annual compendium, and on the ACM SIGDA web page. We are grateful for the SIGDA’s forward-looking publication policy, and their accommodating an accelerated schedule enabling the submission deadline to occur only four months before the meeting date. This accelerated schedule was also made possible by the entire submission, review, and final camera-ready submission processes occurring completely electronically via email and the web.

We wish to thank the Technical Program Committee for their efforts in reviewing papers and for contributing to a thorough selection process. We would also like to thank Tony Givargis for his tremendous efforts in processing submissions, reviews, and camera-ready papers.

Further information on the workshop, online proceedings, and past and future CODES workshops is at:

http://www.cs.ucr.edu/~codes99

Welcome to CODES’99, and enjoy Rome!

Frank Vahid  
Program Chair

Ahmed Jerraya  
General Co-Chair

Luciano Lavagno  
General Co-Chair