



2011 International Conference on ReConFigurable Computing and FPGAs ReConFig '11

November 30 – December 2, 2011, Cancun, Mexico
www.reconfig.org



CALL FOR PAPERS

It is our pleasure to invite you to participate in the **2011 International Conference on Reconfigurable Computing and FPGAs (ReConFig '11)**. The sixth ReConFig will be held in **Cancun, Mexico**, during **November 30 - December 2, 2011**. Cancun, a world class tourist resort, is located on the Mexican Caribbean.

ReConFig is one of the leading forums in the field. It aims to bring together an appropriate mix of all theoretical and practical aspects of reconfigurable computing and FPGA technology. The conference seeks to promote the use of reconfigurable computing and FPGAs devices for research, education, and applications, covering from hardware architectures and devices to custom computers and high performance systems.

Reconfigurable computing and FPGA technology have become major subjects of research in computing and electrical engineering as they have been identified as powerful alternatives for creating highly efficient computing systems. Reconfigurable computing offers substantial performance improvements when compared against traditional processing architectures via custom design and reconfiguration capabilities. Reconfiguration is characterized by the ability of hardware architectures or devices to rapidly alter the functionalities of its components and the interconnection between them as needed. Existing theoretical models and algorithms combined with commercially available devices, such as FPGAs, make Reconfigurable Computing a very powerful computing paradigm.

ReConFig covers a broad spectrum of **topics** including, but not limited to:

- ✓ Models, methods, tools, and architectures for reconfigurable computing
- ✓ Compilation, simulation, debugging, synthesis, verification, and test of reconfigurable systems
- ✓ Field programmable gate arrays and other reconfigurable technologies
- ✓ Evolvable hardware and dynamic reconfiguration
- ✓ Algorithms implemented on reconfigurable hardware
- ✓ Reconfigurable computing education
- ✓ Reconfigurable computing applications

In addition to the general session, submissions are invited for the following special **tracks**:

- ✓ High Performance Reconfigurable Computing
- ✓ Reconfigurable Computing for Security and Cryptography
- ✓ Reconfigurable Computing for DSP and Communications
- ✓ Productivity Environments and High Level Languages
- ✓ Multiprocessor Systems and Networks on Chip
- ✓ Reconfiguration techniques
- ✓ Controversy track: FPGAs Vs GPUs

Contributions are also welcome to the **ReConFig 2011 PhD Forum**. All attendees will be encouraged to bring their hardware/software for display at the **ReConFig 2011 Demo Night**.

Conference Proceedings will be edited by the IEEE Computer Society **Conference Publishing Services (CPS)** and will appear at **IEEE Xplore**. Authors of selected papers will be invited to submit an extended version for a **ReConFig'11 Special Issue of the International Journal of Reconfigurable Computing (IJRC)**. Instructions for electronic submission are available in the conference web page.

Important dates:

- ✓ **Paper Submission: July 22, 2011**
- ✓ **Acceptance Notification:** September 19, 2011
- ✓ **Camera-Ready Papers:** October 7, 2011
- ✓ **Conference:** November 30 - December 2, 2011

General Chair

Rene Cumplido, INAOE, Mexico

Program co-Chairs

Peter Athanas, Virginia Tech, USA
Jürgen Becker, Karlsruhe Institute of Technology, Germany

Publicity co-Chairs

Lesley Shannon, Simon Fraser University, Canada
Lionel Torres, LIRMM, France
Elías Todorovich, UNICEN, Argentina

Proceedings Chair

Claudia Feregrino, INAOE, Mexico

Tracks co-Chairs

Ali Akoglu, the University of Arizona, USA
Khaled Benkrid, the University of Edinburgh, UK
Christophe Bobda, University of Arkansas, USA
Joao Cardoso, University of Porto, Portugal
Paul Chow, University of Toronto, Canada
Viktor Fischer, Université de Saint Etienne, France
Kris Gaj, George Mason University, USA
Diana Göhringer, Fraunhofer-Institute, Germany
Michael Hübner, Karlsruhe Institute of Technology, Germany
Loïc Lagadec, University of Western Brittany, France
Jürgen Teich, University of Erlangen-Nuremberg, Germany
Marco D. Santambrogio, MIT, USA
Ron Sass, UNC-Charlotte, USA