



Hardware Design and Functional Languages 2007

24-25 March 2007, Braga, Portugal

A satellite event of the [ETAPS 2007](#) group of conferences

Programme

Saturday, 24 March 2007

- 9:00-9:45** **Arvind, Nirav Dave, and Michael Pellauer** (MIT)
Introducing Scheduling Primitives and Derived Interfaces in Bluespec
- 9:45-10:30** **Satnam Singh** (Microsoft Research Cambridge)
Declarative Programming Techniques for Many-Core Architectures
- 10:30-11:00** **Coffee**
- 11:00-11:45** **Mary Sheeran** (Chalmers)
Searching for prefix networks to fit in a context using a lazy functional programming language
- 11:45-12:30** **Robert S. Boyer and Warren A. Hunt, Jr.** (University of Texas)
The E Language
- 12:30-14:30** **Lunch and time for discussion**
- 14:30-15:15** **Andrew K. Martin and Ahmed Gheith** (IBM)
A framework for designing hardware in Ocaml
- 15:15-16:00** **Carl-Johan H. Seger** (Intel)
High-Level Micro-Architectural Transformations and Cycle-Accurate High-Level Models
- 16:00-16:30** **Coffee**
- 16:30-17:15** **Nathan Chong and Samin Ishtiaq** (ARM)
Functional Programming for Hardware Definition, Verification and Modelling
- 17:15-18:00** **Manfred Schmidt-Schauß and David Sabel** (Johann Wolfgang Goethe-Universität)
Program Transformation for Functional Circuit Descriptions

Sunday, 25 March 2007

- 9:00-9:45** **Koen Claessen** (Chalmers) and **Gordon Pace** (University of Malta)
Embedded Hardware Description Languages: Exploring the Design Space
- 9:45-10:30** **Matthew Naylor** (University of York), **Emil Axelsson** (Chalmers), and **Colin Runciman** (University of York)
Lightweight Relational Programming for Wired
- 10:30-11:45** **Coffee and demos**
- 11:45-12:30** **Jean Baptiste Note and Jean Vuillemin** (Ecole Normale Supérieure Paris)
Towards Automatically Compiling Efficient FPGA Hardware
- 12:30-14:30** **Lunch and discussions**

14:30-15:15	Tim Sheard (Portland State University) <i>Design Principles for Hardware Description</i>
15:15-16:00	Walid Taha, Yousra Alkabani, Cherif Andraos, Jennifer Gillenwater, Gregory Malecha and Angela Yun Zhu (Rice University) and Jim Grundy and John O'Leary (Intel) <i>Hardware descriptions as two-level computations</i>
16:00-18:00	Coffee, demos, planning of next workshop
Evening	WORKSHOP DINNER
