PARMA-DITAM 2022

PARMA 2022: 13th Workshop on Parallel Programming and Run-Time Management Techniques for Many-core Architectures

DITAM 2022: 11th Workshop on Design Tools and Architectures for Multi-Core Embedded Computing Platforms

Location: Room **Lehar I**

Wednesday, 22 June 2022

09:00 – 10:00 HiPEAC Keynote

10:15 – 10:30 PARMA-DITAM Opening session

Chair: Stefano Cherubin, Edinburgh Napier University

10:30 – 11:15 [Invited Talk] On tool flows for high-performance reconfigurable computing

Jeronimo Castrillon, TU Dresden

Chair: Stefano Cherubin, Edinburgh Napier University

11:15 – 11:45 Coffee Break

11:45 – 12:30 [Invited Talk] SO(DA)^2: End-to-end Generation of Specialized Reconfigurable Architectures

Antonino Tumeo, Pacific Northwest National Laboratory

Chair: Stefano Cherubin, Edinburgh Napier University

12:30 – 13:00 Session A: Generation and simulation

Chair: João Bispo, University of Porto

12:30 – 12:45   COLA-Gen: Active learning techniques for automatic code generation of benchmarks

Maksim Berezov, Corinne Ancourt, Justyna Zawalska, and Maryna Savchenko

12:45 – 13:00   Efficient memory management for Modelica simulations

Michele Scuttari, Nicola Camillucci, Daniele Cattaneo, Federico Terraneo, and Giovanni Agosta

13:00 – 14:00 Lunch

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14:00 – 14:45	**Session B – Performance awareness**

Chair: João Bispo, University of Porto

14:00 – 14:15   Energy-aware HEVC Software Decoding On Mobile Heterogeneous Multi-cores Architectures

Mohammed Bey Ahmed Khernache, Jalil Boukhobza, Yahia Benmoussa, and Daniel Menard

14:15 – 14:30   Precision tuning in parallel applications

Gabriele Magnani, Lev Denisov, Daniele Cattaneo, and Giovanni Agosta

14:30 – 14:45   Multithread Accelerators on FPGAs: a Dataflow-based Approach

Francesco Ratto, Stefano Esposito, Carlo Sau, Luigi Raffo, and Francesca Palumbo

14:45 – 15:15	**Coffee Break**

15:15 – 16:00	**[Invited Talk] Just-in-Time Composition of Reconfigurable Overlays**

Alfonso Rodriguez Medina, Universidad Politécnica de Madrid

Chair: Stefano Cherubin, Edinburgh Napier University

16:00 – 16:15	**Closing and Final wrap-up**

Chair: Stefano Cherubin, Edinburgh Napier University

Paper presentations

We invite authors of accepted papers to prepare presentations with slides. Each paper presentation is scheduled to last at most 15 minutes. Time slot includes:
- **10 min oral presentation**
- 3 min Q&A
- 2 min technical setup & speaker introduction by Session chair.

Presenters should provide a short (no more than 3 lines) biography introduction to be handed to the Session chair at the beginning of the Session.

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