PARMA-DITAM Workshop PROGRAM

Tuesday 18/01/2024
Location: Room Venus 2

09:00 – 10:00 – HiPEAC Keynote

10:00 – 10:15 – PARMA-DITAM Opening session
Chair: João Bispo, UPORTO/INESCTEC

10:15 – 11:00 – [Invited Talk] Composable Systems: are we there yet?
Christian Pinto, IBM
Chair: João Bispo, UPORTO/INESCTEC

11:00 – 11:30 – Coffee Break

11:30 – 12:15 – [Invited Talk] Python-native domain-specific compilation for low-level systems
Tobias Grosser, University of Edimburgh
Chair: Sotirios Xydis, NTUA

12:15 – 12:45 – Session A
Chair: Sotirios Xydis, NTUA

12:15 – 12:30 – Embedded Multi-Core Code Generation with Cross-Layer Parallelization
Oliver Oey, Timo Stripf, Juergen Becker and Michael Huebner

12:30 – 12:45 – Accelerator-driven Data Arrangement to Minimize Transformers Run-time on Multi-core Architectures
Alireza Amirshahi, Giovanni Ansaloni and David Atienza

13:00 – 14:00 – Lunch

14:00 – 14:45 – [Invited Talk] High-Level Synthesis developments in the context of European space technology research
Fabrizio Ferrandi, Politecnico di Milano
Chair: João Bispo, UPORTO/INESCTEC

14:45 – 15:30 – Session B
Chair: João Bispo, UPORTO/INESCTEC

14:45 – 15:00 – Zero-Copy, Minimal-Blackout Virtual Machine Migrations Using Disaggregated Shared Memory

Andreas Grapentin, Felix Eberhardt, Tobias Zagorni, Andreas Polze, Michele Gazzetti and Christian Pinto

15:00 – 15:15 – Precision Tuning within a Memory-Safe Programming Language

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

15:15 – 15:30 – Accelerating Large-Scale Graph Processing with FPGAs: Lesson Learned and Future Directions

Marco Procaccini, Amin Sahebi, Marco Barbone, Wayne Luk, Georgi Gaydadjiev and Roberto Giorgi

15:30 – 16:00 – Coffee Break

16:00 – 16:45 – [Invited Talk] Enabling Large Scale Simulations For Particle Accelerators
Konstantinos Iliakis, CERN
Chair: Sotirios Xydis, NTUA

16:45 – 17:00 – Closing and Final wrap-up
Chair: João Bispo, UPORTO/INESCTEC