

PARMA-DITAM Workshop PROGRAM

PARMA-DITAM 2021

**PARMA 2021: 12th Workshop on Parallel Programming and Run-Time Management
Techniques for Many-core Architectures**

**DITAM 2021: 10th Workshop on Design Tools and Architectures for Multi-Core Embedded
Computing Platforms**

Location: **zoom webinar online event**

Tuesday, 19 January 2021

CET time zone

10:00 - 10:10 PARMA-DITAM Opening session

Chair: José Flich, UPV

10:10 - 11:00 [Invited Talk] HPC application cloudification: the streamflow toolkit

Marco Aldinucci, UniTo

Chair: Stefano Cherubin, Codeplay

11:00 - 11:30 Coffee Break

11:30 - 12:20 [Invited Talk] Open-source and High-performance Computing Platforms for Safety-Critical Applications

Carles Hernandez Luz, UPV

Chair: João Bispo, UPorto

12:20 - 13:00 Paper Session A

Chair: Dimitrios Soudris, NTUA

12:20 - 12:40 Towards Adaptive multi-Alternative Process Network

Hasna Bouraoui, Chadlia Jerad and Jeronimo Castrillon

12:40 - 13:00 The Impact of Precision Tuning on Embedded Systems Performance: A Case Study on
Field-Oriented Control

Gabriele Magnani, Daniele Cattaneo, Michele Chiari and Giovanni Agosta

13:00 - 14:00 Lunch

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14:00 - 15:00 [Keynote] Building an open, safe, accessible AI & HPC ecosystem

Andrew Richards, Codeplay

Chair: Giovanni Agosta, PoliMi

15:00 - 16:00 Paper Session B

Chair: José Flich, UPV

15:00 - 15:20 BifurKTM: Approximately Consistent Distributed Transactional Memory for GPUs

Samuel Irving, Lu Peng, Costas Busch and Jih-Kwon Peir

15:20 - 15:40 Resource Aware GPU Scheduling in Kubernetes Infrastructure

Aggelos Ferikoglou, Dimosthenis Masouros, Achilleas Tzenetopoulos, Sotirios Xydis and Dimitrios Soudris

15:40 - 16:00 Applying Parallel Processing on TF-IGM

Joran Cornelisse

16:00 - 16:10 Closing and Final wrap-up

Chair: João Bispo, UPorto

Paper presentations

We invite authors of accepted papers to prepare presentations with slides. Each paper presentation is scheduled to last at most 20 minutes. Time slot includes:

- **15 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.

We additionally encourage presenters to prepare a PDF version of their presentation to be uploaded on the workshop website.