

PMAM 2022 Workshop Program

(2nd April, 2022)

09:00 – 09:10 (EDT): Opening Remarks

Quan Chen, Zhiyi Huang, Min Si

09:10 – 10:00: Keynote

Keynote Speaker: Prof. Bin Ren, College of William & Mary, US

Title: TBD

Abstract: TBD

BIO:

10:00 – 11:00: Session 1

Session Chair: Quan Chen, Shanghai Jiao Tong University

- Pietro Ghiglio, Uwe Dolinsky, Mehdi Goli, and Kumudha Narasimhan. “Improving Performance of SYCL Applications on CPU Architectures using LLVM-directed Compilation Flow”.
- Patrick Flynn, Xinyao Yi, and Yonghong Yan. “Exploring Source-to-Source Compiler Transformation of OpenMP SIMD Constructs for Intel AVX and Arm SVE Vector Architectures”.
- Guillaume Helbecque, Jan Gmys, Tiago Carneiro, Nouredine Melab, and Pascal Bouvry. “A Performance-oriented Comparative Study of the Chapel High-Productivity Language to Conventional Programming Environments”.

11:00- 11:10: Morning Break

11:10 – 12:25: Session 2

Session Chair: Quan Chen, Shanghai Jiao Tong University

- Uzi Vishkin. “Beyond Worst-Case Analysis: Observed Low Depth for a P-Complete Problem”.
- Brandon Nesterenko, Pei-Hung Lin, Chunhua Liao, Brandon Runnels, and Qing Yi. “Modeling Optimization of Stencil Computations Via Domain-level Properties”.

- Shivam Kumar, Anupam Agrawal, and Swarnendu Biswas. “Efficient Data Race Detection of Async-Finish Programs Using Vector Clocks”.
- Patrick Finnerty, Tomio Kamada, and Chikara Ohta. “Integrating a Global Load Balancer to an APGAS Distributed Collections Library”.

12:25: Closing Remarks

Quan Chen, Zhiyi Huang, Min Si