

EoCoE-II: Performance Evaluation Workshop

Monday, 7 October 2019 - Thursday, 10 October 2019

**Erlangen
Programme**

Monday 07 October 2019

Welcome – Intro – Computer architecture - Room number 00.325-128 (ground floor) (13:30-14:50)

- Presenter: HAGER, Georg

Tools: topology, affinity, clock speed - Room number 00.325-128 (ground floor) (14:50-15:20)

- Presenter: HAGER, Georg

Break - Room number 00.325-128 (ground floor) (15:20-15:35)

Microbenchmarking for architectural exploration - Room number 00.325-128 (ground floor) (15:35-16:05)

- Presenter: HAGER, Georg

Hands-On: Logging in, starting a job, running - Room number 00.325-128 (ground floor) (16:05-17:00)

- Presenter: HAGER, Georg

Tuesday 08 October 2019

The Roofline performance model: basics - Room number 00.325-128 (ground floor) (09:00-10:00)

- Presenter: HAGER, Georg

Tools: hardware performance counters and likwid-perfctr - Room number 00.325-128 (ground floor)
(10:00-10:30)

- Presenter: HAGER, Georg

Break - Room number 00.325-128 (ground floor) (10:30-10:45)

Hands-On: STREAM and dense MVM analysis with likwid-perfctr, validating the Roofline model - Room number 00.325-128 (ground floor) (10:45-12:30)

- Presenter: HAGER, Georg

SIMD vectorization - Room number 00.325-128 (ground floor) (13:30-14:15)

- Presenter: HAGER, Georg

ccNUMA and parallel first touch - Room number 00.325-128 (ground floor) (14:15-14:45)

- Presenter: HAGER, Georg

Roofline case study: Stencils - Room number 00.325-128 (ground floor) (14:45-15:30)

- Presenter: HAGER, Georg

Break - Room number 00.325-128 (ground floor) (15:30-15:45)

Hands-On: A preconditioned CG solver: Analysis, Roofline model, model validation - Room number 00.325-128 (ground floor) (15:45-17:30)

- Presenter: HAGER, Georg

Social dinner (19:30-22:30)

Wednesday 09 October 2019

POP methodology - Room number 00.325-128 (ground floor) (09:00-12:30)

- Presenter: GIMENEZ, Judit

Hands-on: Examples of code analysis - Room number 00.325-128 (ground floor) (13:30-17:00)

- Presenter: GIMENEZ, Judit

Thursday 10 October 2019

Roofline case study: sparse matrix-vector multiplication - Room number 00.325-128 (ground floor)

(09:00-10:00)

- Presenter: HAGER, Georg

Hands-On: Participants working on their own code - Room number 00.325-128 (ground floor) (10:00-12:30)

- Presenter: HAGER, Georg