HLPP 2025
18th International Symposium on
High-Level Parallel Programming and Applications

universität innsbruck

Welcome to HLPP 2025

Philipp Gschwandtner & Peter Thoman

2025-07-03

Welcome to Innsbruck!

We (Philipp and Peter) are happy to welcome you to the 18th International Symposium on High-Level Parallel Programming and Applications

HLPP 2025
18th International Symposium on High-Level Parallel Programming and Applications

2025-07-03 – 2025-07-04

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Organizational

- Internet Access
  - **Eduroam**
  - Alternatively, *if you do not have eduroam access*:
    Network: **UIBK** / User: **C7031210** / Pass: **FyUNs7za**

- Locations
  - All sessions take place here, in **Seminar Room 9**
  - Lunch is served at **Uni Lounge**, at the ground floor
  - More information about the Social Event & Dinner later today

Program – Day 1 Morning

08:30 Registration Opens

09:00 Welcome and Opening

09:15 Keynote 1

10:15 Coffee Break

10:30 Technical Session 1

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Towards more Flexible and Dynamic HPC Software Stacks for the Post-Exascale Era

Prof. Dr. Martin Schulz

Program – Day 1 Morning

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10:30 Technical Session 1

PHI: a modern C++ library for parallel pattern composition

Enabling Pinning Strategies for Stream Processing Applications on Multicores

Mneme: A Parallel Preprocessing Framework for Large Tabular Datasets

Program – Day 1 Continued

12:00 Lunch Break

13:30 Technical Session 2

15:00 Coffee Break

15:20 Social Event Information

18:30 Dinner at 1965m Altitude

Program – Day 1 Continued

12:00 Lunch Break

13:30 Technical Session 2

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15:20 Social Event Information

18:30 Dinner at 1965m Altitude

SkePU-Streaming: Distributed Pipelining of Portable Data-Parallel Skeleton Computations for the Heterogeneous Edge-Cloud Continuum

A Zero-Overhead Transpiler-Based Python Frontend for the Skeleton Programming Framework SkePU

Towards Extreme Scalability of Stencil Applications with Parallel Skeletons

Program – Day 2

09:00 Keynote 2

10:00 Coffee Break

10:30 Technical Session 3

12:00 Lunch Break

13:30 Technical Session 4

14:30 Closing Statement

15:00 Coffee Break and Farewell

Program – Day 2

09:00	**Keynote 2**
10:00	Coffee Break
10:30	Technical Session 3
12:00	Lunch Break
13:30	Technical Session 4
14:30	Closing Statement
15:00	Coffee Break and Farewell

Types as a path from abstract to performance?

Prof. Dr. Gabriele Keller

Program – Day 2

09:00	Keynote 2
10:00	Coffee Break
10:30	**Technical Session 3**
12:00	Lunch Break
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14:30	Closing Statement
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High-level Programming of Vulkan-based GPUs through OpenMP

A High-level API for End-to-end Data Compression in Multi-GPU Cluster Applications

SymTensor: Symbolic and Adaptive Tensor Partitioning by Unified Parallelism for Deep Learning

Program – Day 2

09:00 Keynote 2

10:00 Coffee Break

10:30 Technical Session 3

12:00 Lunch Break

13:30 Technical Session 4

14:30 Closing Statement

15:00 Coffee Break and Farewell

East of Eden: Parallel Functional Programming in Idris

Sponsors

Gold Sponsor

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Enjoy HLPP 2025!

- More information:
  https://hlpp-conference.github.io/hlpp-2025

- Any questions?
  Ask us (Philipp and Peter) directly or via
  philipp.gschwandtner@uibk.ac.at
  peter.thoman@uibk.ac.at