Engineering Object Oriented Parallel Software

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Overview

- **Session 1: Accelerators and GPU Computing**
  - Chair: Heinz Kredel
- **Session 2: MPI and Algorithms**
  - Chair: Guillermo Lopez Taboada
EOOPS Accelerators and GPU Computing

• Evaluation of Java for General Purpose GPU Computing
  – Jorge Docampo, Sabela Ramos, Guillermo L. Taboada, Roberto R. Exposito, Juan Tourino, Ramon Doallo

• Object support for OpenMP-style programming of GPU clusters in Java
  – Carolin Wolf, Georg Dotzler, Ronald Veldema, Michael Philippsen

• A Multi-GPU Framework for In-Memory Text Data Analytics
  – Poh Kit Chong, Ettikan Karuppiah, Keh Kok Yong
MPI and Algorithms

- Promoting Data-Centric Supercomputing to the WWW World: Open MPI’s Java Bindings
  - Alexey Cheptsov

- CUDA Powered User-Defined Types and Aggregates
  - Marcin Gorawski, Michal Lorek, Anna Gorawska

- Distributed Gröbner bases computation with MPJ
  - Heinz Kredel

- Straightforward parallelization of polynomial multiplication using parallel collections in Scala
  - Raphael Jolly
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