

Scientific computing on heterogeneous architectures

Wednesday, 14 June 2023 08:45 (1 hour)

Programming for Heterogeneous Architectures - lecture 1

- Introduction to heterogeneous architectures and the performance challenge
- From general to specialized: Hardware accelerators and applications
- Type of workloads ideal for different accelerators
- Trade-offs between multi-core and many-core architectures
- Implications of heterogeneous hardware on the design and architecture of scientific software
- Embarrassingly parallel scientific applications in HPC and CERN

Summary

Presenter: VOM BRUCH, Dorothea (Aix Marseille Univ, CNRS/IN2P3, CPPM, Marseille, France)