

# Scientific computing on heterogeneous architectures

*Tuesday, 12 October 2021 11:45 (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 (CPPM/CNRS)

**Track Classification:** Track 3: Programming for Heterogeneous Architectures