

# Writing parallel software

*Monday, 11 October 2021 16:30 (1 hour)*

Parallel and Optimised Scientific Software - lecture 1

- Amdahl's and Gustafson's laws
- Asynchronous execution
- Finding concurrency, task vs. data parallelism
- Using threading in C++ and Python, comparison with multi-process
- Resource protection and thread safety
- Locks, thread local storage, atomic operations

## Summary

**Presenter:** PIPARO, Danilo (CERN)

**Track Classification:** Track 2: Parallel and Optimised Scientific Software