

Writing parallel software

Tuesday 3 May 2022 08:45 (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

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Track Classification: Track 2: Parallel and Optimised Scientific Software