

Parallel and Distributed Algorithms (ALP)



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- Semester: Second
- Exam mode: written test + oral presentation
- Pre-requisites: notions of Algorithms, Data Structures and Complexity
- Area: Algorithms; Parallel and Distributed Systems

Syllabus



- Two main parts: Parallel Algorithms and Distributed Algorithms
 - The focus is on Models and Algorithms
- Parallel
 - Prefix sums, list ranking, Euler tour, standard techniques and inner sequential problems
- Distributed
 - Communication complexity, Coordination and control (broadcast, spanning tree, election, fault tolerance)

Thesis available



- Control and Coordination of Autonomous Mobile Robots
 - Both theoretical and experimental
- Mobile agents in distributed communication networks