

Features of Parallel and Distributed Systems

- **Concurrency (conflict, confusion)**
- **Synchronization**
- **Resource Allocation to Tasks**
- **Causal vs. Temporal dependencies**
- **Representation of Time in systems (delay, duration of events)**
- **Deadlock detection**
- **Probabilistic nature of events in computing systems**
- **Support for Abstraction and Refinement**
- **Support for Different Programming methodologies (procedural vs. OO)**
- **Rapid Prototyping**
- **Support for Verification and Validation**