Scheduling of Multi-stage Batch Processes Using Dynamic Decomposition on a Grid

- Computer manufacturers focus on multi-core architectures; computational resources become cheap
- Algorithms that utilize new architectures or exploit parallelization necessary
- Batching/scheduling problems have hierarchy of decisions

  Selection of tasks ⇒ Unit-task assignments ⇒ Task sequencing
- Exploit hierarchy to generate subproblems spawned to workstations
- Hard subproblems are dynamically decomposed
- Successful implementation using grid computing