Towards the Combination of Work-Stealing and Semi-Partitioned Scheduling for Parallel Tasks

Motivation

- Multi/many-processor platforms
- Parallel Computing Paradigms
- Semi-partitioned scheduling
- High Performance
- High Responsiveness

Load balancing among cores
Limited number of migrations
High Performance
Better Responsiveness

Current Research

- Extension of the Limited Migrative model to support parallel computations
- Fully partitioned tasks (non-migrating tasks)
- Global multiframe tasks (migrating tasks)
- Migrating tasks can be subject to work-stealing

Proposed Approach

Offline

Online

Concluding Remarks

- Load balancing among cores
- Limited number of migrations
- High Performance
- Better Responsiveness

References