**Management of reconfigurable resources and hardware tasks**

**Application (1)**

- **Temporal Analysis**
  - Each iteration of predecessor execution must include unique iteration of successor execution.
  - Execution of each Hw task during each iteration must respect its deadline by taking into account the precedence and periodicity constraints.

**Determination of Ready Times (2)**

**Overlapping Tasks (3)**

- Overlapping tasks
- RZ workloads
- Overloaded RZ: Migration or increasing RZs

**Mapping/scheduling (4)**

- Constraints
  - Dependencies
  - Deadlines and Periods
  - Non-overlapping and order of execution sections
- Objectives
  - Resource optimization
  - Configuration Overhead
  - Execution span

**Application Results**

- First iteration: No overload
- Next iterations:
  - Iteration 2: RZ2 overloaded by T3 and T5
  - Solution: total migration of T3 to RZ3
  - Iteration 3: RZ2 overloaded by T3 and T5
  - Solution: total migration of T3 to RZ3
  - No need to add new RZ2

**Architecture du futur**

**FOSFOR**

Flexible Operating System For Reconfigurable platform

http://www.polytech.unice.fr/~fmuller/fosfor

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