Working group
Optimizing Real-Time Systems
(OVSTR)

Telecom ParisTech 15th October 2015
**Discussions**

- **WCET point of view**
  - Bounding the CRPD value and add it to the WCET: lots of optimizations proposed, but is the gain not too small by assuming that each preemption increases the CRPD?
  - Integration into the response time analysis: not targeting commonly used caches
    - Should it be linked to the execution model?

- **Scheduling point of view**
  - CRPD-aware scheduling: off-line schedule using a single CPRD value per task
  - Cache-aware scheduling: results not very encouraging

- **What about the OS or hardware point of view?**
  - Can the OS exploit information from the application and/or WCET layer? (e.g. following the control flow graph)
  - Can the hardware exploit information related to the next task to execute?

- **Can we relax the separation of tasks (prefetching, I/O, ...)?**
Proposals for next meeting

- NoC design for real-time systems and associated WCTT analysis techniques / mapping techniques

- Design of time-predictable hardware

- Issues of multicore platforms in Real-time Systems

- Code generation: from high-level models to (certified) machine code

- Other?