

Topics for presentations, EEE8068, 2012/2013

Presentation date – weeks starting 22 and 29 April 2013

Scheduling anomalies -- is it possible to make the things worse by improving computing resources?
Idea, case study, generalisation (what causes this effect).

- 1.

Aperiodic EDF optimality

- 1.

- 2.

Aperiodic EDF complexity -- np-complete complexity of non-preemptive EDF

- 1.

- 2.

Aperiodic non-preemptive EDF -- Bratley's algorithm

- 1.

- 2.

Aperiodic non-preemptive EDF -- the Spring algorithm

- 1.

- 2.

EDF with precedence constraints -- optimality and case study

- 1.

- 2.

Periodic RM scheduler -- upper bound of processor utilisation (hyperbolic bound) and examples

- 1.

- 2.

Priority inheritance protocol -- schedulability and examples

- 1.

- 2.

Priority ceiling protocol -- schedulability and examples

- 1.

- 2.

Handling overload conditions -- overview only

- 1.