Workshop: Practical Model Predictive Control

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PLEASE BRING YOUR OWN LAPTOP WITH MATLAB (or Octave)\*

\*Instructions will be provided on how to install Octave if you do not have Matlab

**Day 1 (Tuesday 13 Jan. 2015)**

9:00 Introduction of participants

9:15 Background

10:45 Break

11:00 MATLAB: Implement discrete internal model control (IMC)

12:00 Review Simulation Results

12:30 Lunch

13:30 Introduction to Model Predictive Control (MPC)

15:00 Break

15:15 Exercise: Derive coincidence point control

15:45 MATLAB: Implement co-incidence point control

16:15 MPC: Disturbance Rejection

17:00 End

**Day 2 (Wednesday 14. Jan. 2015)**

9:00 MPC with constraints: QMPC

10:45 Break

11:00 MATLAB: Implement QMPC

12:30 Lunch

13:30 MPC Applications

15:00 Break

15:15 MPC Applications

16:30 MPC Applications

17:00 End