Seminari del Prof. Daniel Honc

su Model Predictive control con esercitazioni in Matlab

**Programma**

*7 Maggio 2019*

14,45 Registrazione partecipanti

15,00 Vice Coordinatore del Dottorato in Energia e Tecnologie dell’Informazione

Prof. Eleonora Riva Sanseverino

15,10 "Introduction to Process Control”

Professor Daniel Honc, University of Pardubice.

*9 Maggio 2019*

15,00 "Model Predictive Control workshop”

Professor Daniel Honc, University of Pardubice.

**Abstract**

Brief introduction to Process Control will be given. Control strategieslikefeedforward and feedback, standard controllers, tuningmethods, stability, qualitymeasures and digital control will be discussed. Examples in MATLAB and Simulinkwill be solvedat the workshop. Predictive control is an on-line optimal control with use of the dynamicalprocess model. MPC will be presentedwith stress to itskeyfeatures, strengths and weaknesses. Itwill be demonstratedhow to get a predictor in case of the input-output or state-spaceprocess model. MPC applications in MATLAB will be demonstratedat the workshop – the influence of the process model order, horizons and penalizationparameters to the control qualitywill be discussed.