ISTITUTO DI MATEMATICA APPLICATA E TECNOLOGIE INFORMATICHE (CNR)
DIPARTIMENTO DI MATEMATICA "FELICE CASORATI"
via Ferrata,1 – 27100 Pavia (Italia)

Seminario di Matematica Applicata

Martedì 20 Maggio 2003 alle ore 15 (precise) a Pavia, nella Sala Conferenze dell'IMATI-CNR (ex IAN), il

Prof. Lalo Magni
Università di Pavia

terrà la conferenza:

Stabilizing model predictive control for nonlinear systems

Abstract. Model Predictive Control (MPC), also referred to as Receding Horizon (RH) control, is an optimization based tool for designing control laws for a wide range of industrial plants because of its capability of handling physical constraints and multivariable systems. MPC for linear constrained systems is widely accepted and used in many practical process control applications. The expectations for Nonlinear Model Predictive Control (NMPC, i.e. MPC based on a nonlinear plant description) are high, because of its additional ability to take into account process nonlinearities. The possible success in industrial applications is strongly related to the fulfillment of the following properties: low computational load, large domain of attraction, good performance and robustness. In the lecture these aspects will be discussed with reference to the algorithms proposed in the literature of the last years.

La S.V. è cordialmente invitata.

☕ Dopo la conferenza sarà organizzato un breve rinfresco ☕