

European Embedded Control Institute

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International Graduate School on Control

M11 - HANGZHOU 24/03/2014 - 28/03/2014

Nonlinear and Adaptive Control



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Abstract of the course:

Goal of this course is to present a class of recently developed control tools for the robust stabilization, by state and output feedback, of classes of nonlinear systems. These new tools enable to give an alternative formulation and solution to the stabilization problem for general nonlinear systems by means of the notions of systems immersion and manifold invariance (I&I). I&I methods are particularly suited to robustify, with respect to unmodelled dynamics, a given controller scheme. They have also proved useful in adaptive control where stabilizing controller problems, a parameterized in terms of some unknown constant vector is assumed to be known. Adaptive control applications will be the main focus of this workshop.

Topics include:

- State feedback stabilization and adaptive control via immersion and invariance
- Output feedback adaptive control via immersion and invariance
- Applications in adaptive control
- Applications to electromechanical systems
- Open problems

Important information:

- Registration Due: December 21, 2013
- Registration Fee: Free for masters; 150 EUR for PHD
- Locations: Yuquan Campus , Zhejiang University

Note that EECI is a non profit organization, therefore any benefit (if any) are re-used the year after for awarding grants to selected students.

You Are Welcome to Register !!!







