ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO THE DOCTORAL SEMINAR

Partial stabilization of nonlinear mechanical systems with random disturbances

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Chaired by Christian Pötzsche | Department of Mathematics

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N.2.35

ABSTRACT

The talk will be devoted to the problem of partial stabilization of mechanical systems, described by Ito stochastic differential equations. The considered problem is related to the asymptotic stability property of invariant sets and has important applications in mechanics and engineering. Sufficient conditions for the asymptotic stability of an invariant set are proposed by using a stochastic version of LaSalle's invariance principle. Mechanical examples are presented to illustrate the efficiency of the obtained controllers.

We hope to see you there!