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Vortragsankündigung

Regelungssysteme Diplomanden- und Doktoranden-Seminar
LV 0430L 033

Dienstag, 23. Februar 2016, 10:30 Uhr

Vortragort: EN 656

Sawsan Abokoos,

Modeling and Identification of Nonlinear Control Systems

Modeling and identification is a crucial stage of control design. One or both of the two tasks should be carefully gone through for an adequately developed control system design. In this talk, we will build a thorough model of an electromechanical system dynamics taking into account all major nonlinearities of the system electronics and mechanics, and developed an identification algorithm with a control point of view. Identification algorithm and Recursive Least-squares (RLS) algorithm will be simulated and used to observed the optimal parameters of the system. Furthermore, linear and nonlinear models have to be obtained for identification and discussed in detail. The nonlinearities will be studied and paid on complex structure of Weiner-Hammerstein model. Finally, results will be presented, simulated and analyzed using different applications and examples.