

# FAKULTÄTSKOLLOQUIUM

Am Mittwoch, dem 19. August 2015, spricht um 15:00 Uhr im Raum Z 4005

Prof. Dr.-Ing. Jaime A. Moreno

(UNAM Mexico)

zum Thema:

„Nonlinear Observers: Continuous and Discontinuous“

## Zusammenfassung:

Observers are able to estimate unmeasured variables of a dynamic process from the measured ones by using the mathematical model. They find many applications, since they are basic units for output feedback control, fault detection and supervision, and identification.

In this talk we will present some approaches developed in our group to design observers for nonlinear systems. In particular, we will give an introduction to discontinuous observers, providing as a motivation for using them the very strong robustness (insensitivity) properties they have with respect to non vanishing perturbations or uncertainties. We provide examples and show some advances in their design by using Lyapunov methods.

*Alle Interessenten sind herzlich eingeladen.*

Die Hochschullehrer der Fakultät

Ilmenau, 12.08.2015