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VORTRAGSANKÜNDIGUNG

Im Rahmen unseres gemeinsamen Oberseminars

„Numerische Mathematik, Optimierung und Dynamische Systeme“

spricht

Herr **Dr. Philipp Braun**

Chair of Applied Mathematics, University of Bayreuth *and*
School of Elect. Engineering and Computer Science, University of Newcastle

am **Montag, 10. Juli 2017**, 16:00 Uhr c. t. über das Thema

Title: “(Nonsmooth) Control Lyapunov Functions”

Abstract:

Control Lyapunov functions (CLFs) and the design of feedback controllers from CLFs has faded from the spotlight over recent years even though their full potential has not been explored yet. To reactivate research on CLFs we review existing results on (nonsmooth) CLFs in the context of stability and stabilization of nonlinear dynamical systems. Moreover, we highlight open problems and results on CLFs for destabilization. The talk concludes with ideas on Complete CLFs, which combine the concepts of stability and instability, and with the numerical construction of nonsmooth CLFs. The results presented in the talk are illustrated and motivated on the examples of a nonholonomic integrator and Artstein’s circles.

Der Vortrag findet im S 80, Gebäude NW II statt.

gez. Lars Grüne