Einladung zum Oberseminar Dynamische Systeme und Kontrolltheorie

Julius-Maximilians-Universität Würzburg
Professur für Dynamische Systeme und Kontrolltheorie

M. Sc. Ivan Atamas

JMU Würzburg, Professur für Dynamische Systeme und Kontrolltheorie

Operator methods of constructing matrix-valued Lyapunov functions

We consider a two-component coupled system of differential equations with operator coefficients. In contrast to the well-known small-gain approach, we assume the presence of the exponential stability property of only one subsystem. We introduce a condition for the dominance of this subsystem, which allows us to prove new conditions for the exponential stability of a coupled system. An example of infinite networks is given. The results are compared with a small-gain approach based on the Lyapunov vector function.

Ort: Mathematik Ost, Seminarraum 01.003 Zeit: Freitag, 29.11.2024.2024 14:45

Zu diesem Vortrag laden wir Sie herzlich ein.

gez. Sergey Dashkovskiy