Eugene Wigner Colloquium

joint event of GRK 1558 and SFB 910

Dr. Elena Panteley

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"Analysis and control design for networks of Stuart-Landau oscillators and applications to neuronal populations"

One of the main motivations for analysis of networks of nonlinear oscillators lies in their role in modeling of synchronization and collective behavior in chemical and biological systems. In medical systems such networks are used for synchronization analysis of neuronal populations and control design for synchrony suppression. In this paper we use tools issued from nonlinear stability theory and graph theory for analysis and control of heterogeneous networked Stuart-Landau oscillators via a feedback control using mean field measurements.

Thursday, 26.11.15 · 16:15h · EW 202

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