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**24. November 2008**

# Einladung zum Vortrag

von

## Dr. Fatihcan M. Atay

MAX PLANCK INSTITUTE FOR MATHEMATICS IN THE SCIENCES, LEIPZIG

# Networks and Dynamics

This talk will consider several dynamical processes taking place on networks. Starting from simple random walks on graphs, I will move on to collective dynamics, such as consensus and synchronization, and indicate their relation as dual problems. At a further level of complexity, dynamics with time delays and networks with time-varying links will be studied. In all cases the emphasis will be on identifying the properties of the underlying graph that are relevant for the dynamical process under consideration. A particularly important question is then, which of these properties are inherited from the physical or geometrical context from which the graph is defined.

**Termin: Dienstag, 9. Dezember 2008, 17:15 Uhr**

**Ort: Universität Ulm, Helmholtzstr. 18, Raum 220**

Interessenten sind herzlich eingeladen.

Der Vortrag findet im Rahmen des Mathematischen Kolloquiums statt.

gez. E. Spodarev