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**“The true slime mold Physarum:
a self-organizing system of
behavioral intelligence”**

The plasmodium of the true slime mold *Physarum polycephalum* is a single multi-nucleate giant amoeboid cell. This primitive organism senses various external stimuli, judges the information, and acts behaviorally by changing its shape as well as moving toward or away from the stimuli. My talk will deal with various phenomena concerning the behavioral “intelligence” of this organism: the ability of forming the shortest path, signaling pathways or networks for judging the multiple stimulation, spatio-temporal patterns of rhythmic contraction for controlling the cell behavior, etc. Discussions will also be made on the further possibility of this organism as a model system for systems biology.

Dienstag, 25. November 2008, 14 Uhr c.t.

Gebäude E2 6, Seminarraum E.04

Alle Interessenten sind herzlich eingeladen.

Die Sprecher des Graduiertenkollegs
Manfred Lücke und Ludger Santen

**Strukturbildung und Transport
in komplexen Systemen**