

Symposium Nonlinear and Anomalous Transport in Complex Systems (SYNF)

jointly organized by
 Section Biological Physics (PB),
 Section Dynamics and Statistical Physics (DY), and
 Working Group Physics of Sozio-Economic Systems (AKSOE)

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Biological, social and physical systems far from thermodynamic equilibrium typically exhibit transport phenomena that are nonlinear, anomalous and interesting. This symposium provides insight into cutting edge research on transport phenomena in various systems on a wide range of scales. The aim is to illustrate key principles, discern essential similarities, identify crucial differences and put the transport phenomena into a global perspective.

Overview of Invited Talks and Sessions

(lecture room H1)

Invited Talks

SYNF 1.1	Wed	14:45–15:15	H1	Depolymerization of microtubules by kinesins — ●JONATHON HOWARD
SYNF 1.2	Wed	15:15–15:45	H1	Hydra Molecular Network Reaches Criticality at the Symmetry-Breaking Axis-Defining Moment — JORDI SORIANO, CYRIL COLOMBO, ●ALBRECHT OTT
SYNF 1.3	Wed	15:45–16:15	H1	Morphogen Transport in Epithelia — ●TOBIAS BOLLENBACH
SYNF 1.4	Wed	16:15–16:45	H1	Flocks, Herds and Schools - Physical Models of Animal Motion — ●UDO ERDMANN
SYNF 1.5	Wed	16:45–17:15	H1	Nonlinear transport processes in large-scale ecological networks — ●BERND BLASIUS

Sessions

SYNF 1.1–1.5	Wed	14:30–17:15	H1	Nonlinear and Anomalous Transport in Complex Systems
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