

# Physics of Socio-economic Systems Division

## Fachverband Physik sozio-ökonomischer Systeme (SOE)

Prof. Dr. Dirk Helbing  
 ETH, Chair of Sociology, in particular of Modeling and Simulation  
 Universitätstrasse 41, CH-8092 Zürich, dhelbing@ethz.ch

### Overview of Invited Talks and Sessions

(lecture rooms H10, H44, H46 and H1; Poster C)

#### Plenary Talks related to SOE

PV X Thu 8:30– 9:15 H1 **Complex Networks: From Statistical Physics to the Cell** — ●ALBERT LASZLO BARABASI

#### Tutorial

SOE 1.1 Sun 16:00–18:00 H10 **Time Series Analysis in Sociophysics and Econophysics** — ●JOHANNES J. SCHNEIDER, ●TOBIAS PREIS

#### Invited Talks

SOE 2.1 Mon 9:30–10:15 H44 **Don't panic! - The physics of pedestrian dynamics and evacuation processes** — ●ANDREAS SCHADSCHNEIDER  
 SOE 7.1 Tue 9:30–10:00 H44 **Humans playing spatial games** — ●ARNE TRAUlsen  
 SOE 12.1 Wed 9:30–10:15 H44 **The hidden complexity of open source software** — ●FRANK SCHWEITZER  
 SOE 17.1 Thu 9:30–10:15 H44 **Wave localization in complex networks** — ●JAN W. KANTELHARDT  
 SOE 22.1 Fri 9:30–10:15 H44 **Hypergraphs and social systems** — ●GUIDO CALDARELLI

#### Focus Session: Science of Science

SOE 4.1 Mon 13:30–14:00 H44 **Following the actors: individual and collective behavior in epistemic landscapes** — ●ANDREA SCHARNHORST  
 SOE 4.2 Mon 14:00–14:30 H44 **Tracking science in real-time from large-scale usage data.** — ●JOHAN BOLLEN  
 SOE 4.3 Mon 14:45–15:15 H44 **Mapping change in science** — ●MARTIN ROSVALL, CARL BERGSTROM  
 SOE 4.4 Mon 15:15–15:45 H44 **Statistical physics of citation behavior** — ●SANTO FORTUNATO

#### Young Scientist Award for Socio- and Econophysics

SOE 5.1 Mon 16:00–16:45 H44 **Tying the double knot: Robustness of interconnected networks** — ●SHLOMO HAVLIN  
 SOE 5.2 Mon 17:00–17:45 H44 **Unveiling the patterns of human mobility and global disease dynamics** — ●DIRK BROCKMANN

**Sessions**

SOE 1.1–1.1	Sun	16:00–18:00	H10	<b>Tutorial: Time Series Analysis in Sociophysics and Econophysics</b>
SOE 2.1–2.1	Mon	9:30–10:15	H44	<b>Traffic Dynamics, Urban and Regional Systems I</b>
SOE 3.1–3.6	Mon	10:15–12:00	H44	<b>Traffic Dynamics, Urban and Regional Systems II</b>
SOE 4.1–4.4	Mon	13:30–15:45	H44	<b>Focus Session: Science of Science</b>
SOE 5.1–5.2	Mon	16:00–18:00	H44	<b>Award Ceremony: Young Scientist Award for Socio- and Econophysics</b>
SOE 6.1–6.8	Mon	18:00–20:00	Poster C	<b>Poster Session</b>
SOE 7.1–7.5	Tue	9:30–11:00	H44	<b>Evolutionary Game Theory I (with BP)</b>
SOE 8.1–8.5	Tue	11:15–12:30	H44	<b>Evolutionary Game Theory II (with BP)</b>
SOE 9.1–9.2	Tue	12:30–13:30	H44	<b>Social Systems, Opinion and Group Dynamics I</b>
SOE 10.1–10.7	Tue	14:00–16:00	H44	<b>Evolutionary Game Theory III (with BP)</b>
SOE 11	Tue	16:00–16:30	H44	<b>SOE Members' Assembly</b>
SOE 12.1–12.1	Wed	9:30–10:15	H44	<b>Social Systems, Opinion and Group Dynamics II</b>
SOE 13.1–13.9	Wed	10:15–12:45	H44	<b>Networks: From Topology to Dynamics I (with BP, DY)</b>
SOE 14.1–14.8	Wed	14:00–16:00	H44	<b>Social Systems, Opinion and Group Dynamics III</b>
SOE 15.1–15.4	Wed	16:00–18:00	H44	<b>Financial Markets and Risk Management I</b>
SOE 17.1–17.1	Thu	9:30–10:15	H44	<b>Networks: From Topology to Dynamics II (with BP, DY)</b>
SOE 18.1–18.10	Thu	10:15–13:00	H44	<b>Networks: From Topology to Dynamics III (with BP, DY)</b>
SOE 19.1–19.7	Thu	14:00–16:00	H44	<b>Networks: From Topology to Dynamics IV (with BP, DY)</b>
SOE 20.1–20.5	Thu	16:00–17:15	H44	<b>Networks: From Topology to Dynamics V (with BP, DY)</b>
SOE 21.1–21.6	Thu	10:15–13:30	H46	<b>Financial Markets and Risk Management II</b>
SOE 22.1–22.1	Fri	9:30–10:15	H44	<b>Social Systems, Opinion and Group Dynamics III</b>
SOE 23.1–23.5	Fri	10:15–13:00	H44	<b>Financial Markets and Risk Management III</b>

**Annual General Meeting of the Physics of Socio-economic Systems Division**

Tue 16:00–16:30 H44