

## Physics of Socio-economic Systems Division Fachverband Physik sozio-ökonomischer Systeme (SOE)

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### Overview of Invited Talks and Sessions

(Lecture rooms MA 001, H 0104, BH-N 128, H 2033, EB 107, Urania, and Poster E)

#### Public Evening talk (in german)

PLV X Wed 20:00–21:00 Urania **Kollektive Dynamik in Sozialen Systemen: Netzwerke, Emotionen und Big Data** — ●FRANK SCHWEITZER

#### Invited Tutorial talks

SOE 1.1 Sun 16:00–16:50 H 0104 **Market microstructure: dynamics of the stock markets** — ●THOMAS GUHR  
SOE 1.2 Sun 16:50–17:40 H 0104 **Maximum-entropy models in economics and finance** — ●TIZIANO SQUARTINI  
SOE 1.3 Sun 17:40–18:30 H 0104 **350 years of puzzles in economics – and a solution.** — ●OLE PETERS

#### Young Scientist Award for Socio- and Econophysics (YSA) - Award Session and Prize Talk

SOE 6.1 Mon 15:00–15:45 MA 001 **Tipping points and crises in simple macroeconomic models** — ●JEAN-PHILIPPE BOUCHAUD  
SOE 6.2 Mon 16:00–16:45 MA 001 **Network science beyond networks: Information flow models for social and biological systems** — ●MARTIN ROSVALL

#### Invited and Topical Talks

SOE 8.1 Tue 9:30–10:15 MA 001 **Estimation of Agent-Based Models using Sequential Monte Carlo Methods** — ●THOMAS LUX  
SOE 18.1 Thu 9:30–10:00 MA 001 **Epidemic threshold on temporal networks** — ●VITTORIA COLIZZA  
SOE 18.2 Thu 10:00–10:30 MA 001 **Critical regimes driven by recurrent mobility patterns of reaction-diffusion processes in networks** — ●JESUS GOMEZ-GARDENES  
SOE 18.3 Thu 10:30–11:00 MA 001 **Phase Transitions in Cooperative Coinfections** — ●PETER GRASSBERGER, LI CHEN, FAKHTEH GHANBARNEJAD, WEIRAN CAI  
SOE 18.4 Thu 11:15–11:45 MA 001 **Linear and nonlinear scenarios of societal change** — ●ANDRZEJ NOWAK  
SOE 18.5 Thu 11:45–12:15 MA 001 **Collective Sensing and Decision-Making in Animal Groups: From Fish Schools to Primate Societies** — ●IAIN COUZIN  
SOE 23.1 Fri 9:30–10:00 MA 001 **Network reconstruction for the prediction of spreading processes** — ●DIEGO GARLASCHELLI

**Sessions**

SOE 1.1–1.3	Sun	16:00–18:30	H 0104	<b>Tutorial: Dynamics and Fluctuations in Economic and Financial Markets (joint session SOE/DY/TUT/AKjDPG)</b>
SOE 2.1–2.4	Mon	9:30–10:30	MA 001	<b>Financial Markets and Risk Management I</b>
SOE 3.1–3.4	Mon	10:30–11:30	MA 001	<b>Economic Models I</b>
SOE 4.1–4.7	Mon	11:30–13:15	MA 001	<b>Social Systems, Opinion and Group Dynamics I</b>
SOE 5.1–5.4	Mon	12:00–13:00	BH-N 128	<b>Energy Systems / Power Grids (joint session DY/SOE)</b>
SOE 6.1–6.2	Mon	15:00–17:00	MA 001	<b>Award Session: Young Scientist Award for Socio- and Econophysics (YSA)</b>
SOE 7.1–7.31	Mon	17:00–20:00	Poster E	<b>Poster</b>
SOE 8.1–8.1	Tue	9:30–10:15	MA 001	<b>Monte Carlo Methods in Financial Market Modeling (Invited Talk Thomas Lux)</b>
SOE 9.1–9.4	Tue	10:15–11:30	MA 001	<b>Economic Models II</b>
SOE 10.1–10.4	Tue	11:30–12:30	MA 001	<b>Financial Markets and Risk Management II</b>
SOE 11.1–11.3	Tue	12:30–13:15	MA 001	<b>Evolutionary Game Theory (joint session SOE/DY/BP)</b>
SOE 12.1–12.7	Tue	14:00–15:45	MA 001	<b>Focus Session: Opinion Formation and Voter Models</b>
SOE 13.1–13.11	Wed	9:30–12:15	MA 001	<b>Networks: From Topology to Dynamics (joint session SOE/CPP/BP/DY)</b>
SOE 14	Wed	12:15–13:00	MA 001	<b>Annual Member’s Assembly</b>
SOE 15.1–15.1	Wed	15:00–15:30	MA 001	<b>Dynamics in Real-World Multiplex Networks (Invited Talk Vito Latora) (joint session DY/SOE)</b>
SOE 16.1–16.9	Wed	15:30–18:00	MA 001	<b>Networks: From Topology to Dynamics (joint session DY/SOE)</b>
SOE 17.1–17.3	Wed	18:15–19:00	MA 001	<b>Social Systems, Opinion and Group Dynamics II</b>
SOE 18.1–18.9	Thu	9:30–13:15	MA 001	<b>Complex Contagion Phenomena I (Focus Session with EPS-SNPD) (joint session SOE/DY/BP)</b>
SOE 19.1–19.11	Thu	10:00–13:00	BH-N 128	<b>Chimera states: symmetry-breaking in dynamical networks (joint session DY/SOE)</b>
SOE 20.1–20.4	Thu	15:00–18:00	H 2033	<b>Reduction and Emergence in Econophysics (joint session AGPhil/SOE)</b>
SOE 21.1–21.5	Thu	15:00–16:15	MA 001	<b>Traffic Dynamics, Urban and Regional Systems (joint session SOE/DY)</b>
SOE 22.1–22.7	Thu	16:15–18:00	MA 001	<b>Focus Session: Computational Social Science</b>
SOE 23.1–23.13	Fri	9:30–13:15	MA 001	<b>Complex Contagion Phenomena II (Focus Session with EPS-SNPD) (joint session SOE/DY/BP)</b>
SOE 24.1–24.8	Fri	10:00–12:15	EB 107	<b>The Physics of Power-Grids – Fluctuations, Synchronization and Network Structures (joint session DY/SOE)</b>

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

Wednesday 12:15–13:00 MA 001

- Report on activities and general announcements
- Elections
- Miscellaneous