

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

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Overview of Invited Talks and Sessions

(Lecture rooms: HSZ 03, GÖR 226, and ZEU 118; Posters: P2)

Award Session: Young Scientist Award for Socio- and Econophysics

SOE 5.1	Mon	16:15–17:00	HSZ 03	The Mesh of Civilizations in the Global Network of Digital Communications — BOGDAN STATE, INGMAR WEBER, YELENA MEJOVA, ●MICHAEL MACY
SOE 5.2	Mon	17:15–18:00	HSZ 03	Complex (social) networks: from description to prediction — ●ROGER GUIMERA

Invited and Topical Talks

SOE 1.1	Mon	9:30–10:15	GÖR 226	The robustness of complex networks — ●HANS HERRMANN
SOE 2.2	Mon	10:30–11:00	GÖR 226	Statistical Mechanics of a Firm Growth Process — ●CORNELIA METZIG
SOE 5.1	Mon	16:15–17:00	HSZ 03	The Mesh of Civilizations in the Global Network of Digital Communications — BOGDAN STATE, INGMAR WEBER, YELENA MEJOVA, ●MICHAEL MACY
SOE 7.1	Tue	9:30–10:15	GÖR 226	Measuring the scientific impact of research using bibliometric analysis — ●LUIS AMARAL
SOE 12.1	Wed	9:30–10:15	GÖR 226	Crystallized Imagination: Economic Development through the eyes of information — ●CESAR HIDALGO

Focus Session: Complex Systems Approaches to Language and Communication (chaired by E.G. Altmann)

SOE 8.1	Tue	10:15–10:45	GÖR 226	A Comparative Study of Language Complexity in Wikipedia — ●JÁNOS KERTÉSZ, TAHA YASSERI, ANDRÁS KORNAI
SOE 8.2	Tue	10:45–11:00	GÖR 226	Statistical Mechanics of Human Language — ●KOSMAS KOSMIDIS
SOE 8.3	Tue	11:00–11:15	GÖR 226	Topic models and scaling laws — ●MARTIN GERLACH, EDUARDO G. ALTMANN
SOE 8.4	Tue	11:15–11:30	GÖR 226	Reading Stockholm Riots 2013 in social media by text-mining — ●ANDRZEJ JARYNOWSKI, AMIR ROSTAMI
SOE 8.5	Tue	11:45–12:15	GÖR 226	Agent-based models of consensus in language dynamics — ●MARTINA PUGLIESE, CHRISTINE CUSKLEY, CLAUDIO CASTELLANO, FRANCESCA COLAIORI, VITTORIO LORETO, FRANCESCA TRIA
SOE 8.6	Tue	12:15–12:30	GÖR 226	Spatial language dynamics in Northern Italy before standardization — ●GERO VOGL, MICHAEL LEITNER, PAUL VIDESOTT
SOE 8.7	Tue	12:30–12:45	GÖR 226	Endogenous and exogenous effects on the adoption curves of linguistic innovations — ●FAKHTEH GHANBARNEJAD, MARTIN GERLACH, JOSE M. MIOTTO, EDUARDO G. ALTMANN

SOE 8.8 Tue 12:45–13:00 GÖR 226 **A Coarse Grained Approach for Distinguishing Whale "Dialects"**
— •SARAH HALLERBERG, HEIKE VESTER, KURT HAMMERSCHMIDT, MARC
TIMME

Invited talks of the joint symposium SYEE (SOE/DY/jDPG): Energy Meets Economy: Dynamics and Statistics of Future Energy Systems (chaired by M. Timme and J.C. Claussen)

See SYEE for the full program of the symposium and SOE 14 for the accompanying session.

SYEE 1.1 Wed 15:00–15:30 HSZ 02 **Smart Grids - From incentives to coupled markets** — •RUDOLF SOL-
LACHER
SYEE 1.2 Wed 15:30–16:00 HSZ 02 **Energy and the economy** — •REINER KÜMMEL
SYEE 1.3 Wed 16:00–16:30 HSZ 02 **Planetary constraints to energy supply and the economy** — •OLIVER
RICHTERS
SYEE 1.4 Wed 16:45–17:15 HSZ 02 **Identifying critical infrastructures in complex supply networks** —
•DIRK WITTHAUT
SYEE 1.5 Wed 17:15–17:45 HSZ 02 **Short time fluctuations of renewable energies** — •JOACHIM PEINKE,
M. REZA RAHIMI TABAR, PATRICK MILAN, MATTHIAS WÄCHTER

Invited talks of the joint symposium SYGP (DY/BP/SOE): Stochastic Dynamics of Growth Processes in Biological and Social Systems (chaired by T. Galla and A. Traulsen)

See SYGP for the full program of the symposium and SOE 23 for the accompanying session.

SYGP 1.1 Thu 15:00–15:30 HSZ 02 **Noisy invasions: large fluctuations in stochastic invasion models** —
•BARUCH MEERSON
SYGP 1.2 Thu 15:30–16:00 HSZ 02 **Fractal clustering of inertial particles in random velocity fields** —
•BERNHARD MEHLIG, KRISTIAN GUSTAVSSON
SYGP 1.3 Thu 16:00–16:30 HSZ 02 **Stochastic population dynamics on rugged fitness landscapes** —
•JOACHIM KRUG
SYGP 1.4 Thu 16:45–17:15 HSZ 02 **Modeling cancer as a stochastic process** — •TIBOR ANTAL
SYGP 1.5 Thu 17:15–17:45 HSZ 02 **Von Neumann's growth model: from statistical mechanics to cell
metabolism** — •ANDREA DE MARTINO

Sessions

SOE 1.1–1.1 Mon 9:30–10:15 GÖR 226 **Robustness in Socio-Economic Systems (Invited Talk Hans
Herrmann)**
SOE 2.1–2.6 Mon 10:15–12:00 GÖR 226 **Dynamics of Social and Financial Networks**
SOE 3.1–3.5 Mon 12:00–13:15 GÖR 226 **Financial Markets and Risk Management**
SOE 4.1–4.3 Mon 15:00–16:15 HSZ 03 **Social Systems, Opinion and Group Dynamics I**
SOE 5.1–5.2 Mon 16:15–18:15 HSZ 03 **Award Session - Young Scientist Award for Socio- and
Econophysics (YSA)**
SOE 6.1–6.18 Mon 18:00–20:00 P2 **Poster Session**
SOE 7.1–7.1 Tue 9:30–10:15 GÖR 226 **Networks and Social Systems (Invited Talk Luis Amaral)**
SOE 8.1–8.8 Tue 10:15–13:00 GÖR 226 **Focus Session: Complex Systems Approaches to Language
and Communication**
SOE 9.1–9.38 Tue 9:30–12:30 P1 **Poster - Glasses / Stat. Phys. Bio. / Networks (joint session
DY/BP/CP/PP/SOE)**
SOE 10.1–10.4 Tue 15:00–16:00 GÖR 226 **Networks, From Topology to Dynamics I (joint with DY and
BP)**
SOE 11 Tue 18:30–19:30 GÖR 226 **Annual SOE Member's Assembly**
SOE 12.1–12.1 Wed 9:30–10:15 GÖR 226 **Information Science and Economic Processes (Invited Talk
Cesar Hidalgo)**
SOE 13.1–13.6 Wed 10:15–11:45 GÖR 226 **Social Systems, Opinion and Group Dynamics**
SOE 14.1–14.6 Wed 11:45–13:15 GÖR 226 **Energy meets Economy: Dynamics and Statistics of Future
Energy Systems (accompanying symposium SYEE joint with
DY and jDPG)**
SOE 15.1–15.5 Wed 15:00–17:45 HSZ 02 **Symposium SYEE: Energy Meets Economy: Dynamics and
Statistics of Future Energy Systems**

SOE 16.1–16.14	Wed	15:00–18:45	ZEU 118	Networks - Statistics and Dynamics (joint with BP and DY)
SOE 17.1–17.6	Thu	9:30–11:00	GÖR 226	Economic Models
SOE 18.1–18.5	Thu	11:00–12:15	GÖR 226	Evolutionary Game Theory and Economic Models (joint with BP and DY)
SOE 19.1–19.3	Thu	12:15–13:00	GÖR 226	Networks, From Topology to Dynamics II (joint with DY and BP)
SOE 20.1–20.5	Thu	15:00–17:45	HSZ 02	Symposium SYGP: Stochastic Dynamics of Growth Processes in Biological and Social Systems
SOE 21.1–21.2	Fri	9:30–10:00	GÖR 226	Traffic Dynamics, Urban and Regional Systems I
SOE 22.1–22.4	Fri	10:00–11:00	GÖR 229	Traffic Dynamics, Urban and Regional Systems II
SOE 23.1–23.11	Fri	10:00–12:45	GÖR 226	Stochastic Dynamics of Growth Processes in Biological and Social Systems (session accompanying symposium SYGP, joint with DY and BP)

Annual General Meeting of the Physics of Socio-Economic Systems Division

Tue 18:30–19:30 GÖR 226

- Report on activities
- Dissemination of events
- Discussion of future work of the division
- Collection of suggestions for future symposia and focus sessions
- Election of representatives of SOE
- Miscellaneous

After the assembly, there will be an informal get-together dinner in one of the restaurants in Dresden (details to be announced in the assembly).