

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

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Overview of Invited Talks and Sessions

(lecture rooms H 0110, H 0105, HE 101, MA 004, MA 001; Poster F)

Keynote Talks related to SOE

SOE 4.1 Mon 14:00–14:45 H 0105 **The Fragility of Interdependency: Coupled Networks & Switching Phenomena** — ●H. EUGENE STANLEY

Tutorial and Panel Discussion Scientific Writing

SOE 1.1 Sun 16:00–16:20 H 0105 **Tutorial for authors and referees** — ●HERNAN ROZENFELD
 SOE 1.2 Sun 16:20–16:40 H 0105 **From submission to publication with IOP journals - a guide for authors** — ●TIM SMITH
 SOE 1.3 Sun 16:40–17:00 H 0105 **Preparing and submitting a scientific paper** — ●RACHEL WON
 SOE 1.4 Sun 17:00–17:20 H 0105 **Writing to meet expectations** — ●MARK BUCHANAN

Invited Talks

Further invited talks are listed below as parts of focus sessions.

SOE 11.1 Wed 9:30–10:15 H 0110 **Adaptive Networks of Opinion Formation in Humans and Animals** — ●THILO GROSS
 SOE 17.1 Thu 9:30–10:15 H 0110 **Common design principles of metabolic networks and industrial production** — ●MARC HÜTT

Focus Session: Big Data

SOE 5.1 Mon 15:00–15:30 HE 101 **Cities and Complexity** — ●MICHAEL BATTY
 SOE 5.2 Mon 15:30–16:00 HE 101 **Experimental Computational Finance & Big Data Environment** — ●PHILIP TRELEAVEN
 SOE 5.3 Mon 16:00–16:30 HE 101 **Embedding high dimensional data on networks** — ●TIZIANA DIMATTEO
 SOE 5.4 Mon 16:30–17:00 HE 101 **Econophysics and social research with large sets of data** — ●ROSARIO N. MANTEGNA

Focus Session: Models of War and Conflict

SOE 8.1 Tue 9:30–10:00 H 0110 **The distribution and dynamics of war sizes** — ●AARON CLAUSET
 SOE 8.2 Tue 10:00–10:30 H 0110 **Modeling Wars and Terrorism: From particles to people** — ●NEIL JOHNSON
 SOE 8.3 Tue 10:30–11:00 H 0110 **Spatio-Temporal Dynamics of Violence in Jerusalem** — ●KARSTEN DONNAY

Award Ceremony: Young Scientist Award for Socio and Econophysics

SOE 16.1	Wed	18:00–18:40	H 0105	The Role of Agent Based Models in Understanding Human Societies — ●STEFAN THURNER
SOE 16.2	Wed	18:50–19:30	H 0105	The evolution of cooperation in simple agent based models — ●ARNE TRAUlsen

Invited talks of the joint symposium SYCF

See SYCF for the full program of the symposium.

SYCF 1.1	Wed	9:30–10:00	H 0105	Der Reaktorunfall von Fukushima: Unfallablauf, Emissionen, Immissionen — ●GERALD KIRCHNER, BERNHARD FISCHER
SYCF 1.2	Wed	10:00–10:30	H 0105	Radiologische und radioökologische Aspekte des Reaktorunfalles von Fukushima — ●GERHARD PROEHL
SYCF 1.3	Wed	10:30–11:00	H 0105	Wie Fukushima die Energiepolitik und Energieforschung in Deutschland und international verändert — ●JOACHIM KNEBEL
SYCF 1.4	Wed	11:00–11:30	H 0105	Entscheidungszwänge in der Weltenergieversorgung und Klimapolitik bei hoher Unsicherheit — ●CARL CHRISTIAN VON WEIZSÄCKER

Invited talks of the joint symposium SYND

See SYND for the full program of the symposium.

SYND 1.1	Thu	9:30–10:00	H 0105	Controlling Complex Networks with Compensatory Perturbations — ●ADILSON E. MOTTER
SYND 1.2	Thu	10:00–10:30	H 0105	Toward control, prediction, and optimization of biological and engineering complex networks — ●KAZUYUKI AIHARA
SYND 1.3	Thu	10:30–11:00	H 0105	Design of robust functional networks as complex combinatorial optimization problem — ●ALEXANDER S. MIKHAILOV
SYND 1.4	Thu	11:00–11:30	H 0105	Braess Paradox, (In-)Stability and Optimal Design: Nonlinear Dynamics of Modern Power Grids — ●MARC TIMME, DIRK WITTHAUT, MARTIN ROHDEN, ANDREAS SORGE
SYND 1.5	Thu	11:30–12:00	H 0105	Delay-Coupled Laser Networks: Complex Behavior, Synchronization and Applications — ●INGO FISCHER

Sessions

SOE 1.1–1.4	Sun	16:00–18:30	H 0105	Tutorial and Panel Discussion Scientific Writing
SOE 2.1–2.4	Mon	9:30–10:45	H 0110	Financial Markets and Risk Management I
SOE 3.1–3.6	Mon	11:00–12:30	H 0110	Economic Models and Evolutionary Game Theory I
SOE 4.1–4.1	Mon	14:00–14:45	H 0105	Keynote Talk
SOE 5.1–5.4	Mon	15:00–17:00	HE 101	Focus Session: Big Data
SOE 6.1–6.6	Mon	17:15–18:45	HE 101	Focus Session: Big Data (Contributed Talks)
SOE 7	Mon	19:00–19:30	H 0110	Annual Member’s Assembly of SOE
SOE 8.1–8.3	Tue	9:30–11:00	H 0110	Focus Session: Models of War and Conflict
SOE 9.1–9.6	Tue	11:15–12:45	H 0110	Energy and Environment
SOE 10.1–10.6	Tue	14:00–15:30	H 0110	Social Systems, Opinion and Group Dynamics I
SOE 11.1–11.1	Wed	9:30–10:15	H 0110	Networks, From Topology to Dynamics I (joint w. DY)
SOE 12.1–12.9	Wed	10:15–12:45	H 0110	Networks, From Topology to Dynamics II (joint w. DY)
SOE 13.1–13.7	Wed	14:00–15:45	H 0110	Communication and Language
SOE 14.1–14.7	Wed	15:00–16:45	MA 004	Networks, From Topology to Dynamics III (joint w. DY)
SOE 15.1–15.21	Wed	16:45–17:50	Poster F	Poster Session
SOE 16.1–16.2	Wed	18:00–20:00	H 0105	Award Ceremony: Young Scientist Award for Socio- and Econophysics
SOE 17.1–17.1	Thu	9:30–10:15	H 0110	Traffic Dynamics, Urban and Regional Systems I
SOE 18.1–18.4	Thu	10:15–11:15	H 0110	Traffic Dynamics, Urban and Regional Systems II
SOE 19.1–19.3	Thu	11:30–12:15	H 0110	Social Systems, Opinion and Group Dynamics II
SOE 20.1–20.5	Thu	14:00–15:15	H 0110	Social Systems, Opinion and Group Dynamics III
SOE 21.1–21.6	Thu	15:30–17:00	H 0110	Economic Models and Evolutionary Game Theory II
SOE 22.1–22.8	Fri	10:00–12:00	MA 001	Networks, From Topology to Dynamics IV (joint w. DY)

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

Mo 19:00–19:30 H 0110