

Symposium Dynamics of Opinion Formation – From Quorum Sensing to Polarization (SYOF)

jointly organised by
 the Physics of Socio-economic Systems Division (SOE),
 the Dynamics and Statistical Physics Division (DY),
 and the Biological Physics Division (BP)

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Quorum sensing is a widespread biological mechanism through which cells can exchange information and achieve a consensus state – hence a pre-social opinion formation process. In societies, opinion formation is a complex dynamical process that can, depending on the voting system and social interactions, lead to polarized societies or multi-parties systems. This symposium focuses on the dynamical processes underlying this opinion formation, the influence of the underlying topology of the opinion space (binary/Ising, Potts, continuous, higher-dimensional) and the resulting phase transitions.

Overview of Invited Talks and Sessions

(Lecture hall HSZ 01)

Invited Talks

SYOF 1.1	Mon	9:30–10:00	HSZ 01	Towards understanding of the social hysteresis – insights from statistical physics — ●KATARZYNA SZNAJD-WERON
SYOF 1.2	Mon	10:00–10:30	HSZ 01	Polarization in attitude distributions from surveys and models of continuous opinion dynamics — ●JAN LORENZ, MARTIN GESTEFELD
SYOF 1.3	Mon	10:30–11:00	HSZ 01	Collective patterns and stable misunderstandings in networks striving for consensus without a common value system — ●JOHANNES FALK, EDWIN EICHLER, KATJA WINDT, MARC-THORSTEN HÜTT
SYOF 1.4	Mon	11:15–11:45	HSZ 01	A yet undetected cognitive bias, revealed by opinion dynamics simulations — ●GUILLAUME DEFFUANT
SYOF 1.5	Mon	11:45–12:15	HSZ 01	Extreme switches in kinetic exchange models of opinion. — ●PARONGAMA SEN, KATHAKALI BISWAS

Sessions

SYOF 1.1–1.5	Mon	9:30–12:15	HSZ 01	Dynamics of Opinion Formation – From Quorum Sensing to Polarization
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