

Symposium Tipping Points in Social and Climate Systems (SYTP)

jointly organised by
the Physics of Socio-economic Systems Division (SOE),
the Dynamics and Statistical Physics Division (DY),
the Environmental Physics Division (UP),
the Thin Films Division (DS), and
the Working Group "Young DPG" (AKjDPG).

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The concept of tipping points has become central to understanding both climate dynamics and social transformations. This symposium brings together physicists and interdisciplinary researchers to explore the mechanisms underpinning tipping behavior in complex systems. Topics include nonlinear dynamics of the Earth system, early warning signals of climate tipping points, and the emergence of social tipping cascades in response to policy, technology, and behavioral shifts.

Overview of Invited Talks and Sessions

(Lecture hall HSZ/AUDI)

Invited Talks

SYTP 1.1	Thu	15:00–15:30	HSZ/AUDI	Social Tipping in Heterogeneous and Polarized Populations — •SARA CONSTANTINO, SONKE EHRET, ELKE WEBER, SONJA VOGT, CHARLES EFFERSON
SYTP 1.2	Thu	15:30–16:00	HSZ/AUDI	Tipping points and regime shifts in coupled social-climate systems — •CHRIS BAUCH
SYTP 1.3	Thu	16:00–16:30	HSZ/AUDI	How to tune Earth system models toward tipping? — •SEBASTIAN BATHIANY, NIKLAS BOERS
SYTP 1.4	Thu	16:45–17:15	HSZ/AUDI	Algorithmic amplification and contextual sensitivity in political information exposure — IRIS DAMIÃO, ANA VRANIC, PAULO ALMEIDA, LÍLIA PERFEITO, •JOANA GONÇALVES DE SÁ
SYTP 1.5	Thu	17:15–17:45	HSZ/AUDI	The complex interplay between democracy and platform power — •PHILIPP LORENZ-SPREEN

Sessions

SYTP 1.1–1.5	Thu	15:00–17:45	HSZ/AUDI	Tipping Points in Social and Climate Systems
SOE 16.1–16.4	Thu	11:30–12:45	GÖR/0226	Tipping Points in Social and Climate Systems (accompanying session for SYTP)