SG Final Symposium The Complexity of Social and Economic Systems: **From Models to Measures**





Opening Remarks

Prof. Dr. Ingo Scholtes

Chair of Machine Learning for Complex Networks Center for Artificial Intelligence and Data Science Julius-Maximilians-Universität Würzburg ingo.scholtes@uni-wuerzburg.de

Welcome!



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Social capital



Chair of Systems Design

image credit: www.sg.ethz.ch

Stepping outside your comfort zone



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A struggle towards the heights



Sisyphus by Titian, 1548 – 1549

image credit: public domain

Session I: Coordination, Collaboration, and Success



Marton Karsai

Memory, Causality and Their Consequences in Temporal Networks

Department of Network and Data Science, Central European University Vienna (Austria)

See Abstract

October 31, 2024 | 09:30-10:00



Christoph Gote

Decoding Collaboration: Predicting and Optimising Software Development through Networks

Axpo Group

See Abstract

October 31, 2024 | 10:00-10:20



Giacomo Vaccario

Knowledge in socio-economic systems: Insights from collaboration, mobility, and data-driven models

ETH Zürich

See Abstract

October 31, 2024 | 10:20-10:40



Ingo Scholtes

What makes teams successful? A Network Science Perspective

Center for Artificial Intelligence and Data Science, Universität of Würzburg

See Abstract

October 31 2024 | 10:40-11:00

Session II: Dependency, Risk and Resilience



Mauro Napoletano

Extreme Events in Micro- and Macroeconomic Dynamics: Theory and Empirical Evidence

Université Côte d'Azur, Sophia-Antipolis (France)

See Abstract

October 31, 2024 | 11:30-12:00



Rebekka Burkholz

Cascade Processes for Sparse Machine Learning

CISPA Helmholtz Center for Information Security, Saarbrücken (Germany)

See Abstract

October 31, 2024 | 12:00-12:20



Stefano Battiston

Climate change and financial risk

University of Zurich and Ca Foscari of Venice

See Abstract

October 31, 2024 | 12:20-12:40



Giona Casiraghi

Quantifying Resilience in Complex Systems: From Robustness to Adaptivity
Chair of Systems Design, ETH Zürich

See Abstract

October 31, 2024 | 12:40-13:00

Session III: Emotions, Opinions and Polarization



Andreas Flache

The Complexity of Social Polarization: Connecting Individual Opinions and Societal Dynamics with Agent-Based Models and Experiments

Department of Sociology, University of Groningen, NL

See Abstract

October 31, 2024 | 14:30-15:00



Jan Lorenz

Opinion Distributions in the Real World

School of Business, Social and Decision Sciences, Constructor University Bremen (Germany)

See Abstract

October 31, 2024 | 15:00-15:20



Laurence Brandenberger

The Rise of Extremes: Tracing the Surge in Swiss Political Polarization

Professorship for Political Methodology, University of Zurich (Switzerland)

See Abstract

October 31, 2024 | 15:20-15:40



David Garcia

Online emotions and how to measure them

Computational Social Science Lab, University of Konstanz

See Abstract

October 31, 2024 | 15:40-16:00

Farewell Lecture "Dämmerung"

17:00 c.t.



Prof. Dr. Dr. Frank Schweitzer

The journey continues ...



image credit: The Grey Havens by Alan Lee