



CSH – ICS Meeting

Complexity theory meets the observation on complex systems: From microstructures to societies

(co-sponsored by the AT-CZ 215 ImageHeadstart project)

AGENDA

July 23, 2021

COMPLEXITY SCIENCE HUB VIENNA
PALAIS STROZZI
JOSEFSTAEDTER STRASSE 39
A-1080 VIENNA





Workshop Organizers

Dalibor Štys, University of South Bohemia in České Budějovice · Institute of Complex Systems

Jan Korbel, Medical University of Vienna/Complexity Science Hub Vienna

Invited Participants

Dalibor Štys, Institute of Complex Systems, FFPW, University of South Bohemia, Zámek 136, 373 33, Nové Hradky, Czech Republic

Renata Štysová Rychtáriková, Institute of Complex Systems, FFPW, University of South Bohemia, Zámek 136, 373 33, Nové Hradky, Czech Republic

Kirill Lonhus, Institute of Complex Systems, FFPW, University of South Bohemia, Zámek 136, 373 33, Nové Hradky, Czech Republic

Rudolf Hanel, Medical University of Vienna / Complexity Science Hub Vienna

Tuan Pham Minh, Medical University of Vienna / Complexity Science Hub Vienna

Jan Korbel, Medical University of Vienna / Complexity Science Hub Vienna

ABOUT THE COMPLEXITY SCIENCE HUB VIENNA

The objective of CSH is to host, educate, and inspire complex systems scientists who are dedicated to collect, handle, aggregate, and make sense of big data in ways that are directly valuable for science and society. Focus areas include smart cities, innovation dynamics, medical, social, ecological, and economic systems. CSH is a joint initiative of AIT Austrian Institute of Technology, IASA International Institute for Applied Systems Analysis, Medical University of Vienna, Vienna University of Technology, Graz University of Technology, and Vienna University of Economics and Business.



AGENDA

08:30 - 09:00 **Registration & Coffee**

09:00 - 09:10 **Welcome and Introduction**
Jan Korbe and Dalibor Štys

09:10 – 09:50 **Thermodynamics of structure-forming systems**
Jan Korbel

09:50 – 10:30 **Light microscope down to the limits of physical localization
and spectral identification of objects, in time**
Renata Štysová Rychtáriková

10:30 – 10:45 **Coffee break**

10:45 – 11:30 **Physical demonstration of the microscope and analysis,
introduction of the new concept in digital microscopy**
Renata Štysová Rychtáriková, Kirill Lonhus and Dalibor Štys

11:30 – 13:00 **Lunch break**

13:00 – 13:40 **Bullied fish role and leaders' candidates in structures of fish schools**
Kirill Lonhus

13:40 – 14:20 **Model of the Covid 19 spreading explains differences between spatiotemporal oscillations
in Austria, Czech Republic and Germany and predicts the equilibrium state**
Dalibor Štys

14:20 – 14:30 **Coffee break**

14:30 – 15:10 **Balanced Triad Formation explained by Homophily-induced Dyadic Interactions**
Tuan Pham Minh

15:10 – 15:50 **TBA**
Rudolf Hanel

15:50 – 16:00 **Coffee and Adjourn**