

## **Session Program**

**1-3 Dec 2023**

# **Dynamics of biological systems: emergent phenomena at different scales**

## ***Complexity of Life***

Jagiellonian University, A-1-06  
Faculty of Physics, Astronomy and Applied Computer Science, Jagiellonian University, ul. prof.  
Stanisława Łojasiewicza 11, 30-348 Kraków

# Saturday 2 December

11:30

## Complexity of Life: Part I

**Session** |

**Location:** Jagiellonian University, A-1-06, Faculty of Physics, Astronomy and Applied Computer Science, Jagiellonian University, ul. prof. Stanisława Łojasiewicza 11, 30-348 Kraków |

**Convener:** Jakub Mielczarek

11:30–12:15

### Health risks of human space exploration

**Speaker**

Anna Fogtman

12:15–13:00

### Human adaptations for extreme environments during simulated space analog missions

**Speaker**

Agata Kołodziejczyk

13:00–13:20

### Complexity flow graphs

**Speaker**

Mateusz Twardawa

13:20

16:30

## Complexity of Life: Part II

**Session** |

**Location:** Jagiellonian University, A-1-06, Faculty of Physics, Astronomy and Applied Computer Science, Jagiellonian University, ul. prof. Stanisława Łojasiewicza 11, 30-348 Kraków |

**Convener:** Hélder Larraguível

16:30–17:15

### The tale of the mouse and the fly: Biophysical modeling, optimization and inference for elucidating distinct developmental strategies

**Speaker**

Thomas Sokolowski

17:15–17:35

### Emergent Robustness from Multiple Timescale Adaptive Dynamics

**Speaker**

Tuan Pham

17:35–17:45

### Computational modelling approach of nonlinear signalling networks in the fish endocrine system (CANCELLED)

**Speaker**

Baeckkyoung Sung

17:45–17:55

### Pandemic and post-pandemic mobility and contact patterns in Berlin - preliminary results

**Speaker**

Marlli Zambrano

18:05

## Sunday 3 December

11:45

### Complexity of Life: Part III

**Session** |

**Location:** Jagiellonian University, A-1-06, Faculty of Physics, Astronomy and Applied Computer Science, Jagiellonian University, ul. prof. Stanisława Łojasiewicza 11, 30-348 Kraków |

**Convener:** Luciano Marcon

11:45–12:30

#### Self-Organization of Lifelike Behaviours

**Speaker**

Jeremy England

12:30–12:50

#### Effects of toxicity and zooplankton selectivity under seasonal pattern of viruses with time delay on plankton dynamics

**Speaker**

Samares Pal

12:50–13:35

#### Pattern formation during social contagions: epidemics, infodemics and civil unrest

**Speaker**

Mikhail Prokopenko

13:35