

Session Program

4-8 Sept 2023



Joint Annual Meeting of the Swiss and Austrian Physical Society 2023

Biophysics, Medical Physics and Soft Matter

Thursday 7 September

14:00

Biophysics, Medical Physics and Soft Matter: I: Collective Phenomena

Session | Location: Room 117

14:00–14:15

[901] Topology and geometry organize the morphogenesis of active nematic surfaces

Speaker

Claire Dessalles

14:15–14:30

[902] Determining how physical constraints shape organism behaviour

Speaker

Daphne Laan

14:30–14:45

[903] Signalling-dependent refinement of cell fate choice during tissue remodelling

Speaker

Simone Cicolini

14:45–15:00

[904] Density-dependent active flow transition of biological tissues

Speaker

Mathieu Dedenon

15:00–15:15

[905] Universal thermodynamic bounds on symmetry breaking in biochemical systems: from error correction to pattern formation

Speaker

Shiling Liang

15:15–15:30

[906] Collective behaviors in bacterial colonies at curved surfaces

Speaker

Vincent Hickl

15:30–15:45

[907] Symmetry breaking and number control at the onset of centriole assembly

Speaker

Friso Douma

15:45–16:00

[908] Understanding the principles that govern cell-cycle dynamics using experimental evolution

Speaker

Vojislav Gligorovski

16:00–16:15

[909] Polarity mediated self-organization in cellular aggregates

Speaker

Mukund Krishna Kothari

16:15–16:30

[910] Resection of DNA in response to permanent DSBs in *S.cerevisiae***Speaker**

Marco Labagnara

16:30

17:00

Biophysics, Medical Physics and Soft Matter: II: Technology development**Session** | **Location:** Room 117

17:00–17:30

[911] Mitochondrial structure and dynamics: Mysteries and insights**Speaker**

Prof. Suliana Manley

17:30–17:45

[922] Protein fibrils disassembly by the HSP70 chaperone machinery**Speaker**

Davide Cois

17:45–18:00

[926] Predicting behaviour from interneuron activity in *C. elegans***Speaker**

Mrs Mahsa Barzegarkeshteli

18:00–18:15

[914] Tuning colloidal interactions using random light fields.**Speaker**

Augustin Muster

18:15–18:30

[915] Predicting meiosis with a waddington landscape analogy**Speaker**

Maxime Scheder

18:30–18:45

[916] Microfluidics and imaging to understand the *C. elegans* brain development from embryo to adulthood**Speaker**

Elif Gencturk

18:45–19:00

[927] Quantitatively pin-pointing individuality at the single neuron level**Speaker**

Matthieu Schmidt

19:00

Friday 8 September

12:00

Biophysics, Medical Physics and Soft Matter: III: Medical and Medically Relevant Physics

Session | Location: Room 117

12:00–12:30

[921] Ultra-fast treatment delivery to enhance the potential of proton therapy for cancer treatment

Speaker

Vivek Jaysukhlal Maradia

12:30–12:45

[923] Deep-tissue imaging via multi-photon adaptive optics

Speaker

Maximilian Sohmen

12:45–13:00

[925] Secure and versatile data and computing platform for cutting-edge data science in biomedical research compliant with the new Data Protection Act

Speaker

Peter Strassmann

14:00