



Program

Wednesday, September 21, 2022

08:00	Registration
09:00	Welcome
09:05	Jérémie Palacci (Institute of Science and Technology Austria) Active Matter for Self-Assembly
09:45	Christophe Ybert (Lyon 1 University, France) Dynamics in Dense Active Matter
10:25	Coffee Break (Aula)
10:55	Laura Alvarez (University of Bordeaux, France) Soft and Reconfigurable Active Systems: Towards Bioinspired Microdevices
11:35	Michael F. Hagan (Brandeis University, USA) Controlling Active Matter with Confinement and Light
12:15	Lunch (Aula)
13:35	Pawel Romanczuk (HU Berlin, Germany) Self-Organization, Criticality and Collective Information Processing in Animal Groups
14:15	Dora Tang (Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany) Towards Synthetic Cells Using Bottom-Up Synthetic Biology Approaches
14:55	Thomas Voigtmann (Deutsches Zentrum für Luft- und Raumfahrt (DLR), Cologne and Heinrich-Heine-University Düsseldorf, Germany) Dynamics of Active Brownian Particles at High Densities
15:35	Coffee Break (Aula)
15:55	Friedrich C. Simmel (TU Munich, Germany) DNA-based Molecular Robotics
16:35	Fernando Peruani (CY Cergy Paris University, France) Cluster Formation, Order, and Aggregation in Active Matter: Different Classes of Active Phase Separation
17:15	Demian Levis (University of Barcelona, Spain) Collective Behavior of Driven (and Self-Driven) Chiral Particles
18:00	Poster Session and Finger Food (Room 532 and Aula)

Thursday, September 22, 2022

09:00	Simon A. Brown (University of Canterbury, New Zealand) Criticality in Self-Organized Nanoscale Networks
09:40	Giorgio Volpe (University College London, UK) Programmable Lasers from Reconfigurable Colloidal Assemblies
10:20	Coffee Break (Aula)
10:50	Ralph G. Andrzejak (Universitat Pompeu Fabra, Spain) From Partially Synchronized Dynamics of Chimera States to the Fractal Geometry of the Mandelbrot
11:30	Viola Priesemann (MPI for Dynamics and Self-Organization, Göttingen, Germany) Information, Feedback and Self-Stabilization in Social and Neural Networks
12:10	Group Photo Shooting and Lunch (Aula)
13:30	Gianmaria Falasco (University of Padova, Italy) Thermodynamic Consistent Descriptions of Active Matter
14:10	Matthew S. Turner (University of Warwick, UK) Swarming, <i>ab initio</i>
14:50	Ingmar Riedel-Kruse (University of Arizona, USA) Synthetic Adhesion Logic, Bacterial Self-Assembly, and Multicellular Tiling Patterns
15:30	Coffee Break (Aula)
16:00	Sofia Magkiriadou (University of Fribourg, Switzerland) tba
16:40	Patrick Pietzonka (MPI for the Physics of Complex Systems, Dresden, Germany) Engines Driven by Active Matter
17:20	Supriya Krishnamurthy (Stockholm University, Sweden) Inferring Entropy Production from Short Experiments
18:00	Viktor Holubec (Charles University, Prague, Czech Republic) Delayed Active Matter
19:15	Conference Dinner (Ratskeller Leipzig)

Friday, September 23, 2022

09:00	Ignacio Pagonabarraga (EPFL, Lausanne, Switzerland) Hydrodynamically-Induced Instabilities and Emergent Patterns in Active and Driven Suspensions
09:40	Lucio Isa (ETH Zurich, Switzerland) Reconfigurable Active Particles with Finite States Dynamics
10:20	Coffee Break (Aula)
10:50	Corinna Maass (University of Twente, The Netherlands) Hovercrafts and Helicopters: Cooperative States in Active Emulsions
11:30	Daniela Kraft (Leiden University, The Netherlands) Activity-Induced Swimming Heights, Interactions, and Cooperation of Artificial Microswimmers Near Walls
12:10	David R. Nelson (Harvard University, USA) Active Antagonism: Reproducing Microorganisms and Fluid Flow
13:05	Closing
13:15	Lunch (Aula)