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Minisymposium 2: Pattern formation – schedule
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Tuesday 10:30–12:00
Pattern formation in active media

Fernando Peruani, Université Nice Sophia Antipolis, France
Title: Classification of active systems: hydrodynamic equations, instabilities, and pattern formation

Falko Ziebert, University of Heidelberg, Germany
Title: Nonlinear dynamics of moving cells

Lukas Ophaus, University of Münster, Germany
Title: Resting and traveling localized states in an active phase-field-crystal model

Tuesday 12:00–12:30, 15:30–18:00
Dynamics of patterning fronts

Cristián Fernández Oto, Universidad de los Andes, Santiago de Chile, Chile
Title: Front instabilities can reverse desertification

Walter Tewes, University of Münster, Germany
Title: Dewetting Fronts–Patterning in Free Surface Liquid Films

Marcel Clerc, University of Chile, Chile
Title: From propagation from unstable state: theory and experiments

Gyula I. Tóth, Loughborough University, UK
Title: Patterning fronts in quasi-incompressible multicomponent liquids

Haifaa Alrihieli, University of Leeds, UK
Title: Localized traveling waves in thermosolutal convection

Olivier Pierre-Louis, Université Claude Bernard Lyon 1, France
Title: Dynamics of Confined Membranes

Wednesday 10:30–12:30 AND 15:00–16:00
Patterns in heterogeneous media

Walter Zimmermann, Universität Bayreuth, Germany
Title: Size Matters in pattern formation

Massimo Giudici, Université Côte d'Azur, Nice, France
Title: Temporal localized structures in an inhomogeneous parameter landscape

Monica Amparo Garcia Nústes, Pontificia Universidad Católica de Valparaíso, Chile

Title: Pattern formation by heterogeneous parametric excitation: localization, oscillations, and PT symmetry

Priya Subramanian, University of Leeds, UK

Title: Formation and Spatial Localization of Phase Field Quasicrystals

Cedric Beaume, Department of Applied Mathematics, University of Leeds, UK

Title: Three-dimensional doubly diffusive convection: instability and transition to complex dynamics

Tapio Ala-Nissilä, Aalto University, Finland, and Loughborough University, UK

Title: Multiscale modelling of graphene from nano to micron scales

Thursday 10:30–12:30

Pattern formation in technological processes

Patrick Huber, Hamburg University of Technology, Germany

Title: The spontaneous formation of nano patterns in velocity-dependent dip-coated organic films: from dragonflies to stripes

Svetlana Gurevich, University of Münster, Germany

Title: Control and selection of spatio-temporal patterns in dynamic self-assembly systems

Dmitri Tseluiko, Loughborough University, UK

Title: Complex wave dynamics in falling liquid films

Ofer Manor, Israel Institute of Technology, Haifa, Israel

Title: Transitions in polymer deposition states and in the motion of the contact line during the evaporation of a polymer solution

Thursday 15:30–17:30

Delayed-feedback control in Pattern Formation

Kathy Lüdge, Technische Universität Berlin, Germany

Title: Mode-locked lasers with optical self feedback: Pattern formation in the time domain

Julien Javaloyes, University of Balearic Islands, Spain

Title: Neutral delay differential equations for mode-locked lasers: fundamental satellite instabilities

Andrei Vladimirov, Weierstrass Institute, Berlin, Germany

Title: Delay models in nonlinear laser dynamics

Eckehard Schöll, Technische Universität Berlin, Germany

Title: Delayed-feedback control in reaction-diffusion systems

Friday 10:30–13:00

Environmental spatial patterns

Ehud Meron, Ben-Gurion University of the Negev, Beer Sheva, Israel

Title: Vegetation pattern formation and ecosystem function in the Anthropocene

Emilio Hernandez-Garcia, IFISC (UIB-CSIC), Palma de Mallorca, Spain

Title: Vegetation patterns under the sea

Mustapha Tlidi, Université Libre de Bruxelles, Belgium

Title: Spirals and arcs vegetation patterns in arid ecosystems: a self-organized response to water scarcity

Lucas Goehring, Nottingham Trent University, UK

Title: Convection in salt playa

Omer Tzuk, Ben-Gurion University of the Negev, Beer Sheva, Israel

Title: The role of self-organized spatial patterns in the design of agroforestry systems