

# Soft Matter Science and Beyond: From Inert to Living Matter

Benasque, Spain

June 3rd - June 7th 2025

Tuesday 3rd	Wednesday 4th	Thursday 5th	Friday 6th	Saturday 7th
8h30-9h	Registration			
9h-9h40	Isabelle CANTAT	David WEITZ	Itaï COHEN	Bus trip to Barcelona airport 9h
9h40-10h20	Paul CHAIKIN	Thomas SALEZ	Annie COLIN	
10h20-10h40	coffee break	coffee break	coffee break	
10h40-11h20	Zvonimir DOGIC	Jasna BRUJIC	Dave PINE	
11h20-12h	Renaud NICOLAÏ	Erez BRAUN	Jan VERMANT	
12h-16h	Lunch and Discussions	Lunch and Discussions	Lunch and Discussions	
16h-16h40	Fred MACKINTOSH	Valérie RAVAINÉ	Véronique SCHMITT	
16h40-17h20	Eric VANDEN-EIJNDEN	Demian LEVIS	Shmuel RUBINSTEIN	
17h20-17h40	coffee break	coffee break	coffee break	
17h40-18h10	Rémi DREYFUS	Jean BAUDRY	Stefano AIME	
18h10-18h40	Laura ARRIAGA	Miguel RUIZ-GARCIA	Andrew GRIFFITHS	
18h40-19h10	Nicolas BREMOND	Jacques FATTACCIOLI	Patrick TABELING	
19h30-22h	Conference Diner (at conference center)			

Bus trip from  
Barcelona airport  
15h30

Stefano	AIME	Rheofluidics: Single-drop Oscillatory Rheology with Microfluidics
Laura	ARRIAGA	How Fluid Membranes Mediate Force Transduction in Vesicle Motion
Jean	BAUDRY	Evolution of Bacterial Communities
Erez	BRAUN	Biology Meets Physics: The Morphological Potential Underlying Hydra Regeneration
Nicolas	BREMOND	Confined Emulsification
Jasna	BRUJIC	Logical Operations Using Droplets
Isabelle	CANTAT	Flows in Soap Films
Paul	CHAIKIN	Toward Artificial Life with Competition and Evolution
Itai	COHEN	Highly Tunable and Active Soft Matter: from Cartilage to Viscosity Metamaterials
Annie	COLIN	Rheology of Non Brownian Particles
Zvonimir	DOGIC	Dynamics and Mechanics of Shape-shifting Filaments
Remi	DREYFUS	Engineering Colloids for Accumulating and Sensing
Jacques	FATTACCIOLI	Mechanical Characterization of Uptake during Phagocytosis using Functional Lipid Droplets
Andrew	GRIFFITHS	Can Darwinian simple physicochemical systems based on compartmentalised autocatalytic reactions evolve?
Demian	LEVIS	Phase Separation in Driven and Active Model Systems
Fred	MACKINTOSH	Mechanical Phase Transitions and the Rheology of Extracellular Matrices
Renaud	NICOLAÏ	Dynamic Covalent Chemistry and Phase Separation for the Design of Stimulable Materials
Dave	PINE	Self-assembly of Colloidal Diamond Using the Depletion Interaction (no DNA needed)
Valérie	RAVAINE	Emulsions Stabilized by Responsive Microgels
Shmuel	RUBINSTEIN	Catastrophic Failure in Defect-Sensitive Shells
Miguel	RUIZ-GARCIA	Fluidic Metamaterials: Collective Phenomena in Nonlinear Flow Networks
Thomas	SALEZ	Brownian Motion Near Soft Interfaces
Véronique	SCHMITT	Pickering Emulsions Stabilized by Stimuli-responsive Dextran-based Nanoparticles
Patrick	TABELING	Rethinking the Physics of Wetting
Eric	VANDEN-EIJNDEN	Generative Modeling with Flows and Diffusions
Jan	VERMANT	Rough and Nonspherical Building Blocks in Colloidal Gels : Effects of Non Central Forces
David	WEITZ	