

*Organizers:*

Juan L Aragones (IFIMAC-UAM)

Laura R Arriaga (IFIMAC-UAM)

Alberto Fernandez-Nieves (UB-ICREA)

Miguel Ruiz-Garcia (UCM)

Schedule	Sunday, November 2
15:00	Bus from Barcelona, Universitat de Barcelona, Diagonal 686, Metro: L3 Palau Reial (Note that the bus stops opposite University of Barcelona, Facultat de Física i Química)
15:30	Bus from Barcelona airport 'El Prat', Terminal T2A (On leaving exit, turn left and you will find a police building called 'Mossos d'Esquadra'. Cross the road using the zebra crossing and turn left. The bus will stop there.)

Schedule	Monday, November 3
9:00 - 9:45	Opening by Alberto Fernandez-Nieves and Invited Talk by Chantal Valeriani
9:45-11:25	Session 1 – Active Systems Across Scales
11:25-11:55	Coffee
11:55-13:35	Session 2 – Flow, Chirality and Mixing
13:35-15:00	Break
15:00-15:30	Coffee
15:30-17:10	APS Sponsored Session 3: Soft and Adaptive Materials
17:10-19:00	Poster Session
19:00	Welcome reception and posters

Schedule	Tuesday, November 4
9:00 - 9:40	Invited Talk by Marco Polin
9:40-10:40	Session 4 – Interfaces, Transport and Biological Complexity
10:40-11:30	Coffee
11:30-12:10	Session 4 continuation
12:10-12:50	Invited Talk by Aurora Hernandez-Machado
12:50	Adjourn

Schedule	Wednesday, November 5
9:00	Bus from Benasque to Barcelona



Schedule	Program on Monday, November 3
9:00 – 9:05	Opening by Alberto Fernandez-Nieves
9:05 – 9:45	Invited Talk by <u>Chantal Valeriani</u> MECHANICAL PROPERTIES OF ACTIVE MATERIALS
9:45 – 11:25	Session 1 – Active Systems Across Scales
9:45 – 10:05	ACTIVE PARTICLES ENCLOSED BY DROPLETS: EMULSIFICATION AND SELF-PROPULSION. Javier Díaz Brañas, UB
10:05 – 10:25	TRAPPING OF ACTIVE FILAMENTS ON PEANUT-SHAPED SURFACES. Giulia Janzen, UCM
10:25 – 10:45	DEPINNING OF A DRIVEN ACTIVE ROBOT: AN EXACTLY SOLVABLE EXPERIMENTAL SYSTEM. Demian Levis, UB
10:45 – 11:05	MOBILITY-INDUCED PHASE SEPARATION IN A BINARY MIXTURE OF ACTIVE BROWNIAN PARTICLES. Jose Manuel Romero-Enrique, Universidad de Sevilla
11:05 – 11:25	ROLLING, SLIDING AND TRAPPING OF DRIVEN PARTICLES IN SQUARE OBSTACLE LATTICES. Arin Escobar, UAM
11:25 – 11:55	COFFEE BREAK
11:55 – 13:35	Session 2 – Flow, Chirality and Mixing
11:55 – 12:15	COLLOIDAL MAGNUS EFFECT IN A POLYMER SOLUTION. Marco De Corato, Universidad de Zaragoza
12:15 – 12:35	CONFORMAL PHASE TRANSITION IN ACTIVE SYSTEMS. Lasse Bonn, University of Copenhagen
12:35 – 12:55	EMERGING PHENOMENA AND SYMMETRY BREAKING IN ACTIVE NEMATICS. Jordi Ignés-Mullol, UB
12:55 – 13:15	MIXING OF A PASSIVE SCALAR BY ACTIVE NEMATIC TURBULENCE. Giacomo Bartolucci, UB
13:15 – 13:35	STEADY BASE STATES IN 2-D CHIRAL FLOW. Francisco Vega Reyes, Universidad de Extremadura
13:35 – 15:00	Break – Free Time
15:00 – 15:30	COFFEE BREAK
15:30 – 17:10	Session 3 – APS Sponsored Session: Soft and Adaptive Materials
15:30 – 15:50	LIQUID JET IN A FOAM LAYER. Théophile Gaïches, Laboratoire de Physique des Solides, Orsay
15:50 – 16:10	TRAPPING AND COMPRESSION OF COLLOIDAL QUASI-PARTICLES. Joel Torres-Andrés, UB
16:10 – 16:30	LARGE DEFORMATIONS AND PATTERN FORMATION IN MACROSCOPIC HYDROGELS INDUCED BY EXTREME THERMODYNAMICS. Adrián Arenas-Gullo, UB
16:30 – 16:50	SWELLING-DESWELLING AND BIREFRINGENCE OF ALGINATE GELS. Guillaume Briand, UB
16:50 – 17:10	UNRAVELING BIAxIAL NEMATIC LIQUID CRYSTALS: BRIDGING MOLECULAR AND COLLOIDAL SCALES. Alessandro Patti, Universidad de Granada
17:10-19:00	Poster Session
19:00	WELCOME RECEPTION AND POSTERS

Schedule	Program on Tuesday, November 4
9:00 – 9:40	Invited Talk by <u>Marco Polin</u> MOTILITY AND TRANSPORT OF MICROALGAE IN STRUCTURED ENVIRONMENTS
9:40 – 12:10	Session 4 – Interfaces, Transport and Biological Complexity
9:40 – 10:00	BACTERIAL FILAMENTATION: FROM MECHANICS TO SIGNALING. Javier Buceta, CSIC-UV
10:00 – 10:20	MOLECULAR TRANSPORT IN LIPID MESOPHASES: A CHALLENGE AT MULTIPLE SCALES. Salvatore Assenza, UAM
10:20 – 10:40	ON THE ROLE OF WATER ACTIVITY ON THE FORMATION OF A PROTEIN-RICH COFFEE RING IN AN EVAPORATING MULTICOMPONENT DROP. Javier Martinez-Puig, UC3M
10:40 – 11:30	COFFEE BREAK
11:30 – 11:50	RECONFIGURABLE PHOTONIC BOUND STATES IN CONTINUUM USING LIQUID CRYSTAL WAVEGUIDES. Marlin Baral, ICFO-Institute of Photonic Sciences
11:50 – 12:10	SELF-PROPULSION OF ENZYMES IN BIO-CONDENSATES: A HYBRID MODELLING APPROACH. Archana Gopakumar Remanidevi, UB
12:10 – 12:50	Invited Talk by <u>Aurora Hernandez-Machado</u>: MICROFLUIDICS AND BIOMECHANICS: BLOOD MICRORHEOLOGY AND CELL MIGRATION IN CONFINED MICROENVIRONMENTS
12:50	Adjourn