

# PSL Soft and Living Matter days Full Program

## WORKSHOP

**Thursday, July 8th**

8:30-9:00 Welcome

09:00 - 09:15 Introduction by Rémi Carminati (Dean of Research of PSL) and Costantino Creton (ESPCI Dean of research)

09:15 - 09:45 INV TALK **Lydéric Bocquet** (ENS) - Nanofluidics and the development of iontronics

09:45 - 10:30 SESSION Surfaces and Interfaces

Phase separation of a confined binary mixture in a temperature gradient  
*Marc Pascual, Marie-Caroline Jullien*

Polymer drop impacts  
*Aditya Jha, Christophe Clanet, David Quéré*

Emulsion-Templated Poly(N-isopropylacrylamide) Shells Formed by Thermo-Enhanced Interfacial Complexation  
*Lucas SIXDENIER, Christophe Tribet, Emmanuelle Marie*

10:30 - 11:00 Break

11:00 - 12:00 SESSION Interfacial mechanics

Delamination of a thin sheet from an adhesive sphere  
*Vincent Démery, Benjamin Davidovitch, Dominic Vella, Finn Box*

Micromechanics and molecular interpretation of cavitation in soft polymer layers  
*Flora-Maud Le Menn, Costantino Creton, Etienne Barthel*

Interparticle friction and Bulk rheology of Dense suspensions  
*Anh Vu Nguyen Le, Annie Colin, Guillaume Ovarlez*

Transient frictional response of thin hydrogel films: the role of poroelasticity  
*Lola Ciapa, Yvette Tran, Antoine Chateauminois, Emilie Verneuil*

12:00 - 14:00 Lunch

14:00 - 14:30 INV TALK **T. Budtova** (Mines ParisTech) - Bio-aerogels: a new generation of aerogels. Case of thermal insulation and super-insulation

14:00 - 14:30 SESSION Dynamics of polymer systems

Hydrogel thin films: Hydrogel/Substrate interfacial Properties  
*Anusree Augustine, Yvette Tran, Emilie Verneuil, Antoine Chateauinois*

Near-wall velocimetry in semi-dilute polymer flows  
*Gabriel Guyard, Alexandre Vilquin, Nicolas Sanson, Stephane Jouenne, Frédéric Restagno, Joshua McGraw*

Challenges in implementation and rheological characterisation of high Tg vitrimers  
*Sélène Chappuis, François Tournilhac*

Slimming down through frustration  
*Martin Lenz*

15:30 - 16:00 Break

16:00 - 16:30 INV TALK **Teresa Lopez Leon** (ESPCI) - Self-organization under confinement: from liquid crystals to active materials

16:30 - 17:30 SESSION Active systems

Large-Size Honeycomb-Shaped and Iris-Like Liquid Crystal Elastomer Actuators  
*Gaoyu Liu*

A photostable red and NIR amphiphilic polymer photosensitizer with aggregation-induced emission for image-guide photodynamic therapy  
*ZHANG nian, CHEN hui, LI min-hui*

Taming active nematics with geometrical boundaries  
*Claire Doré, Teresa Lopez-Leon, Francesc Sagues, Jordi Ignés-Mullol, Jérôme Hardouin*

Dynamics of active colloidal gel  
*Mengshi Wei, Ben Zion Matan Yah, Olivier Dauchot*

**Friday, July 9, 2021**

09:00 - 09:30 INV TALK **Julie Plastino** (Institut Curie) - Actin-based forces during *C. elegans* development

09:30 - 10:30 SESSION Biophysics

Ordered phase transitions in the acto-myosin cortex of motile bleb protrusions  
*Juan Manuel GARCIA ARCOS, Matthieu Piel*

Compaction and localization of the bacterial nucleoid  
*Ander Movilla Miangolarra, Sophia Hsin-Jung Li, Jean-François Joanny, Ned S. Wingreen, Michele Castellana*

The hydrodynamically optimal length of a flagellum  
*Alexander Chamolly, Eric Lauga*

Self-organization of human mesenchymal stem cells into spheroids trapped with acoustic waves.  
*Nathan Jeger-Madiot, Lousineh Arakelian, Niclas Setterblad, Patrick BRUNEVAL, Mauricio Hoyos, Jerome Larghero, Jean-Luc Aider*

10:30 - 11:00 Break

11:00 - 11:30 INV TALK **Min-Hui Li** (ENSCP) - Biomimetic membranes by amphiphilic polymers

11:30 - 12:30 SESSION Gelation and glass transition

Bringing together different approaches to the glass transition?  
*Paddy Royall*

Collagen, from supramolecular assembly to tissue reconstruction  
*Carole Aimé, Marie-Claire Schanne-Klein, Yong Chen*

Chemical modulation of supramolecular interactions in model collagen gels for advanced mechanical responses  
*Julie Brun, Nadège Pantoustier, Dominique HOURDET, alba marcellan*

Supramolecular Cross-linked Hydrogels: Similarities and Differences with Chemically Cross-linked Networks  
*Sandrine LAQUERBE, Julien Es Sayed, Cédric Lorthioir, Christophe Meyer, Tetsuharu Narita, Guylaine Ducouret, Patrick Perrin, Nicolas Sanson*

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