

- 16 oct** 14h **Welcome**
- 14h10 **Lydéric Bocquet**: Nanofluidic flows on excitable walls
- 14h50 **Hélène Berthoumieux**: The effect of water structure on hydration forces and the electrical double layer
- 15h10 **Olivier Vincent**: Nanofluidics inspired by trees
- 15h30 **Cécile Aprili**: Capture of using aqueous foam: a 2D case study in microchannel
- 15h50 **Break**
- 16h40 **Corentin Trégouët**: Entry effects at the scale of ion-exchange membranes
- 17h20 **Jean Comtet**: Giant mobility of surface-trapped ionic charges following liquid tribocharging
- 17h40 **Said Pashayev**: Electronic response of the SWCNT-FET to distinguish between water confined inside and adsorbed outside carbon nanotube
- 18h **Baptiste Coquinot**: Fluctuation-induced electro-fluidic couplings at the solid-liquid interface
- 18h20 **Cecilia Herrero**: From metallicity to motion: exploring quantum friction and liquid flow-induced currents
- 19h-22h **Cocktail**
- 17 oct** 9h20 **Fabien Montel**: On the many ways to translocate through nanopores: from synthetic polymers to proteins
- 10h00 **Alexander Schlaich**: Bridging microscopic dynamics and hydraulic permeability in mechanically-deformed nanoporous materials
- 10h20 **Break**
- 11h10 **Abdelhamid Maali**: Direct measurement of the viscocapillary lift force near a liquid interface
- 11h50 **Lucas Jannin**: Role of surfactant chemistry on the dynamics of pancake-like droplets
- 12h10 **Théo Emmerich**: Memristive ionic transport in solid-state and  $\beta$ -barrel nanopores: toward brain-inspired ionic (bio)computing
- 12h30 **Damien Toquer**: Controlling solid-liquid friction with ionic modes
- 12h50 **Lunch**
- 14h20 **Anne-Laure Bianco**: Electrokinetics with soap bubbles
- 15h **Malo Velay**: Molecular Scope: watching macromolecular dynamics at solid-liquid interfaces at the single-chain level
- 15h20 **Mathieu Lizée**: Disentangling  $1/f$  noise from confined ion dynamics
- 15h40 **Julien Allègre**: Electromechanical couplings in nanoconfined electrolytes
- 16h **Break**
- 16h50 **Cyril Picard**: Contact line in confinement: equilibrium and dynamics
- 17h30 **Thierry Ondarçuhu**: Energy dissipation of a contact line moving on a nanotopographical defect
- 17h50 **Marie-Caroline Jullien**: Temperature induced phase separation of a binary mixture generating salinity gradients: opening up to waste heat recovery
- 19h30 **Dinner**: Les jardins de Ste Cécile, 18 rue de l'Alma, Grenoble, Tramway B station *Notre-Dame Musée*
- 18 oct** 9h **Sophie Marbach**: Noise in nanopores and the countoscope
- 9h40 **Dolachai Boniface**: Osmotic and phoretic interactions for light-activated hematite
- 10h **Patrick Tabeling**: The relationship between the contact angle and the microscopic characteristics of the solid and the liquid and the implications for slippage
- 10h20 **Break**
- 11h10 **Elisabeth Charlaix**: A nanofluidic exchanger for harvesting saline gradients energy
- 11h50 **Joachim Trosseille**: Patterns formed by water condensation or evaporation in a nanoporous medium containing salt