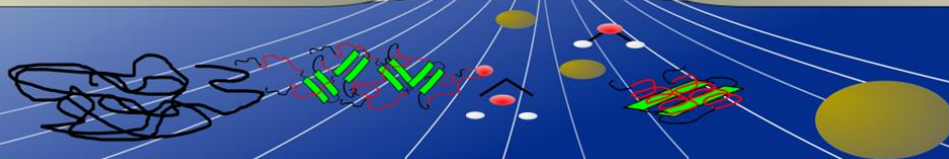


French-Italian workshop

Single Nanopore for Sensing and Energy

Institut Européen des Membranes
University of Montpellier
France

Organisers
Sébastien Balme (IEM) and Juan Pelta (LAMBE)



PROGRAM

Wednesday July 10th

13H30-14H00

Welcoming Coffee

Session 1: Energy / Nanotubes

14H00-14H30 Ionic transport in sub-nanometer fluidic channels
Alessandro Siria (LPS-ENS-Paris).

14H30-14H45 Polyelectrolytes functionalization in track etched nanopore for osmotic energy harvesting-
Tianji Ma (IEM-Montpellier).

14H45-15H00 Biological nanopores for Detection of polysulfure
Benjamin Cressiot (LAMBE-Evry).

15H00-15H15 Improving Li-S battery performances: a supramolecular approach to design a smart nanoporous
Fanny Betemier (LAMBE-Evry, Collège de France-Paris).

15H15-15H30 Ions and water motions in single-walled carbon nanotubes
Francois Henn (L2C-Montpellier).

Coffee break/poster

Session 2: Protein sensing

16H15-16H45 Protein conformation to peptide size and sequence discrimination
Juan Pelta (LAMBE-Evry).

16H45-17H15 Single nanopore to characterise protein aggregations and adsorption on nanoparticles
Sébastien Balme (IEM-Montpellier).

Session 3: Artificial Nanopores

17H15-17H30 Biological applications of hybrid porous metal-organic framework (MOF) materials
Mathilde Lepoitevin (IMAP -ENS-Paris)

17H30-18H00 Decoration of solid state nanopore and insertion in microfluidic devices
Laurent Bacri (LAMBE-Evry).

18H00-18H30 Supramolecular chemistry controlling nanotube morphology improves synthetic nanopore stability
Nathalie Jarroux (LAMBE-Evry).

French-Italian workshop

Single Nanopore for Sensing and Energy

Institut Européen des Membranes
University of Montpellier
France

Organisers
Sébastien Balme (IEM) and Juan Pelta (LAMBE)



PROGRAM

Thursday July 11th

8H45-9H00

Welcoming Coffee

Session 4: Transport

9H00-9H30 Transport through the nuclear pore complex: two complementary approaches
Fabien Montel (ENS-Lyon).

9H30-10H00 Molecule transport and capture in nanopores: a theoretical/computational perspective
Mauro Chinnapi (University Tor Vergata Roma).

10H00-10H15 Theory of ionic transport through bi-cylindrical nanopores
Manoel Manghi (LPT-Toulouse).

10H15-10H30 Particle dynamics in nanopore systems via Brownian simulation
Alberto Gubbiotti (University Tor Vergata Roma).

Coffee break/poster

Session 5: Simulation

11H00-11H30 Study of protein confinement in order to develop functional biomimetic nanopores
Fabien Picaud (LNIT-Besançon).

11H30-11H45 Ionic and electroosmotic flow in biological channel via atomistic simulations: α HL and CsgG nanopores
Giovanni Di Muccio (University Tor Vergata Roma).

11H45-12H00 Simulation of Functional Conical Nanopores in view of sensing application
Nicolas Arroyo (LNIT-Besançon).

12H00-12H15 Role of alpha-hemolysin charges on the ionic current studied by Coarse-Grained Molecular Dynamics
Delphine Dessaux (LAMBE-Evry)