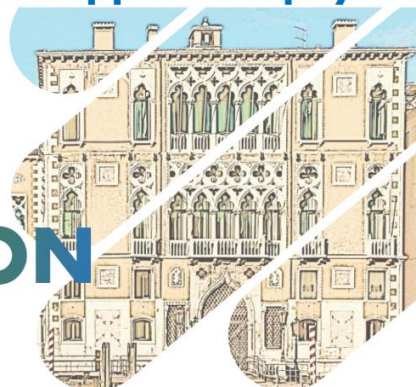


# MOLECULE IN *(ter)* ACTION

**VENICE - Palazzo Franchetti**



**venice2024.ibf.cnr.it**

The aim of this course is to delve into the structure, conformation, dynamics, and interactions of biomolecules in diverse environments, from solutions to living cells and biological tissues.

We will explore a range of experimental techniques for tracking both in vitro and in vivo biochemical reactions and other processes crucial to life.

**Deadline for applications - December 16<sup>th</sup> 2023**

## Confirmed Speakers:

<b>Alberto Diaspro</b>	Opening Lecture
<b>Raffaele Mezzenga</b>	Liquid-Liquid Phase Separation vs Liquid-Liquid Crystalline Phase Separation: Analogies and Differences
<b>Hans Ulrich Dodt</b>	15 years of Ultramicroscopy - from mice to man
<b>Giorgio Schirò</b>	Probing protein structural dynamics by time-resolved X-ray techniques
<b>Francesco Cardarelli</b>	Spatiotemporal image correlation spectroscopy to study dynamic molecular processes at the nanoscale
<b>Peter Hinterdorfer</b>	Avidity Amplification of Spike Variants of Concern explored at Single-Molecule Resolution
<b>Don Lamb</b>	FRET: From single-molecules to cells
<b>Daniel Aili</b>	Real-time biosensing for biomolecular interaction analysis
<b>Valerie Belle</b>	How to explore protein dynamics and interactions using Electron Paramagnetic Resonance spectroscopy
<b>Debora Berti</b>	Leveraging biomolecular interactions from nano to meso-scale to build hybrid systems
<b>Chiara Stringari</b>	Label-free multimodal multiphoton microscopy of living tissues
<b>Paolo Swuec</b>	Imaging what's smaller than light: the Electron Microscopy toolkit
<b>Peter Hinterdorfer</b>	Avidity Amplification of Spike Variants of Concern explored at Single-Molecule Resolution
<b>Claudio Canale</b>	AFM assisted STED microscopy. Looking at the dark side.
<b>Daniele Martella</b>	Artificial muscles powered by light: from microrobotics to biological applications
<b>Francesca Pennacchietti</b>	Photoswitchable fluorescent probe in live cell nanoscopy
<b>Leonardo Sacconi</b>	Advanced Structure-Function Imaging of Cardiac Trans-Scar Electrical Conduction

**Scientific Coordinators:** Luca Lanza<sup>n</sup>ò , Valeria Vetri

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