

XXIX SIBPA-IVSLA International School of Pure and Applied Biophysics



Biomimetic models for exploring membrane
biophysical properties in health and disease

Venice

Jan 27-31 2025



Scientific Coordinators

Loredana Casalis (SIBPA), Elettra
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Milan

Director of the schools

Giorgio M. Giacometti (IVSLA),
University of Padova

Sponsors and patronages:



DETAILED PROGRAM

Monday 27/1/25

10:00 *Registration*

11:15 *Intro and Welcoming*

Giorgio Giacometti (IVSLA, Università di Padova), Loredana Casalis (Elettra Sincrotrone Trieste), Pietro Parisse (CNR- IOM), Valeria Rondelli (Università di Milano)

11:45 **ALBERTO DIASPRO**, Università di Genova and IIT

The I-Bridge. A link between fluorescence and label-free microscopy boosted by Artificial Intelligence

13:00 *Lunch break at palazzo Loredan*

14:00 **ANDREAS BAUSCH**, Technical University Munich

TBD

15:15 **PETRA SCHWILLE**, Max Planck Munich

Membrane models to study protein self-organization

16:30 *Coffee Break*

17:00 **PATRICIA LOZADA-PÉREZ**, University Libre Bruxelles

Quartz crystal microbalance in lipid biophysics research

Tuesday 28/1/25

08:45 **RAYA SORKIN**, University of Tel Aviv

Optical Tweezers Reveal Membrane Remodeling Mechanisms in Biomimetic Systems

10:00 **KISLON VOITCHOVSKY**, Durham University

Biomembranes at the nanoscale: interfacial effects to tune the local structure and mechanics without using ATP

11:15 *Coffee break*/**POSTER SESSION 1**

11:45 **LUCA MONTICELLI**, CNRS Lyon

Molecular dynamics simulations of model membranes

13:00 *Lunch break at palazzo Loredan*

14:30 **YURI GERELLI**, CNR-ISC

Nanoscale structure and dynamics of model membrane systems in solution studied by neutron scattering methods

15:45 **Sponsor Session**

ALFATEST, THERMOFISHER, ZEISS

16:30 *Coffee break*

17:00-18:00 **POSTER SESSION 1 + Sponsor demo session**

Wednesday 29/1/25

08:45 **ORI AVINOAM**, Weizmann Institute

CLEM as a tool to study membrane remodeling across scales

10:00 **PATRICIA BASSAREAU**, Institute Curie Paris

Tuning the mechanical properties of model membranes to study membrane proteins

11:15 *Coffee break*

11:45 **WOJCIECH CHRZANOWSKI**, University of Sidney

TBD

13:00 *Lunch break at palazzo Loredan*

Free afternoon

Thursday 30/1/25

08:45 **DAVID ALSTEENS**, UC Louvain

Probing single-molecule interactions by atomic force microscopy

10:00 **XABIER CONTRERAS**, University of Pais Basque

Chemical biology tools to study biological membranes in living cells.

11:15 *Coffee break*/**POSTER SESSION 2**

11:45 **VALERIA RONDELLI**, Università di Milano

Supported bilayers and reflections for peering deep into membranes

13:00 *Lunch break at palazzo Loredan*

14:30 **BENEDETTA MARMIROLI & BARBARA SARTORI**, TU Graz

Tutorial SAXS

15:00 **ROUND TABLES** on selected topics

16:30 *Coffee break*

17:00-18:00 **POSTER SESSION 2 + Sponsor demo session**

20:00 *Social Dinner at the “Antica Trattoria Poste Vecie”, S.Polo 1608 Rialto Pescheria*

Friday 31/1/25

09:00 **ROBERTO CERBINO**, University of Wien

Biophysical aspects of carcinoma progression

10:15 **ROUND TABLES** wrap-up

11:15 *Coffee break*

11:45 **FLASH TALKS** from Poster Prize Winners and Conclusive Remarks (PARISSE, CASALIS)

	Monday 27/1/25		Tuesday 28/1/25	Wednesday 29/1/25	Thursday 30/1/25	Friday 31/1/25
		8:45-10:00	RAYA SORKIN	ORI AVINOAM	DAVID ALSTEENS	ROBERTO CERBINO
10:00	Registration	10:00-11:15	KISLON VOITCHOVSKY	PATRICIA BASSEREAU	XABIER CONTRERAS	Round tables wrap-up
11:00	Intro+Welcoming	11:15	Coffee break+ POSTER SESSION 1	Coffee break	Coffee break +POSTER SESSION 2	Coffee break
11:30	ALBERTO DIASPRO	11:45	LUCA MONTICELLI	WOJCHEK CHZARNOWSKI	VALERIA RONDELLI	FLASH TALKS + Conclusive remarks
13:00	Lunch	13:00	Lunch	Lunch	Lunch	
14:00	ANDREAS BAUSCH	14:30	YURI GERELLI	Free	BENEDETTA MARMIROLI	
15:15	PETRA SCHWILLE	15:45	Sponsor session	Free	&BARBARA SARTORI Tutorial SAXS + ROUND TABLES (from 15:00)	
16:30	Coffee Break	16:30	Coffee break	Free	Coffee Break	
17:00	PATRICIA LOZADA-PÉREZ	17:00	POSTER SESSION 1	Free	POSTER SESSION 2	