



## **Training School 2018**

Palermo, 6 - 9 February 2018









## **Program**

	Day 1 - Tuesday, Febr 6th
10:30	Registration and Welcome Address
	Maurizio Leone University of Palermo, Dept. of Physics and Chemistry & ATeN Center/CHAB
11:30	<u>Vincenzo Cavalieri</u>
	University of Palermo, Dept. of Biological, Chemical and Pharmaceutical Sciences and Technologies & ATeN Center/CHAB
	TOPIC: Introduction to the Zebrafish model
12:30	<u>Valeria Vetri</u>
	University of Palermo, Dept. of Physics and Chemistry & ATeN Center/CHAB
	TOPIC: Fluorescence Microscopy methods to study molecular interactions in live cells.
13:30	Lunch with teachers
15:00	Practical Session
	Zebrafish Lab.
17:00-19:00	Practical Sessions (Students divided in small groups will perform
	experiment trials in the following labs)
	Pulsed EPR, Confocal Microscopy, NMR, Ultrafast Spectroscopy, Atomic Force
	Microscopy, Raman Microscopy, Nanotechnologies and Molecular Devices

	Day 2 - Wednesday, Febr 7th
10:30	Kleitos Sokratous Cyprus Institute of Neurology & Genetics Dean, The Cyprus School of Molecular Medicine.
	TOPIC: mass spectrometry based proteomics to study protein-protein interactions
11:30	Alberto Boffi Center for Life Nano Science, University La Sapienza, Istituto Italiano di Tecnologia, Roma  TOPIC: engineered proteins for drug delivery
12:30	TOPIC: Spectroscopic methods for protein-protein interaction
13:30	Lunch with teachers
15:00	Practical Session Zebrafish Lab.
17:00-19:00	Practical Session (Students divided in small groups will perform experiments trials in the following labs) Pulsed EPR, Confocal Microscopy, NMR, Ultrafast Spectroscopy, Atomic Force Microscopy, Raman Microscopy, Nanotechnologies and Molecular Devices

Day 3- Thursday, Febr 8th	
10:30	Claudio M. Gomes
	Department Chemistry and Biochemistry, FCUL Faculdade Ciências
	Universidade de Lisboa, Biosystems & Integrative Sciences Institute
	TOPIC: 'Biophysics of amyloid formation'.
11:30	<u>Claudio Canale</u>
	Nanoscopy, Istituto italiano di Tecnologia, Genova
	TOPIC: Cellular level nanomanipulation using atomic force microscope
	aided with superresolution imaging
12:30	<u>Francesco Argenton</u>
	Deparment of Biology, University of Padua, Italy
	TOPIC: "Zebrafish Signaling Reporters: production and analysis"
	Torre. Zeorajish signaling reporters. production and analysis
13:30	Lunch with teachers
15:00	Practical Session
	Zebrafish Lab.
17:00-19:00	Practical Session (Students divided in small groups will perform experiments
	trials in the following labs)

Pulsed EPR, Confocal Microscopy, NMR, Ultrafast Spectroscopy, Atomic Force Microscopy, Raman Microscopy, Nanotechnologies and Molecular Devices

	Day 4- Friday, Febr 9th
10:30	Giorgio Schirò Institut de Biologie Structurale, IBS, Univ. Grenoble Alpes CNRS, Grenoble France
	TOPIC: Ultrafast structural dynamics of proteins by X-FEL
11:30	<u>Ludovico Silvestri</u> European Laboratory for Non-Linear Spectroscopy (LENS), Firenze - Italy
	Advanced light sheet microscopy to investigate brain structure and function.
12:30	Bruno Pignataro* University of Palermo, Dept. of Physics and Chemistry & ATeN Center/CHAB
	TOPIC: Lab-on-a-chip: miniaturized systems for biotechnologies
13:00	Fabrizio Messina* University of Palermo, Dept. of Physics and Chemistry & ATeN Center/CHAB
	TOPIC: Probing electronic molecular dynamics with femtosecond optical spectroscopies
13:30	Lunch with teachers
15:00	Practical Session
	Zebrafish Lab.
17:00-19:00	Practical Session (Students divided in small groups will perform
	experiments trials in the following labs)  Pulsed EPR, Confocal Microscopy, NMR, Ultrafast Spectroscopy, Atomic
	Force Microscopy, Raman Microscopy, Nanotechnologies and Molecular
	Devices