

## XXIV INTERNATIONAL SCHOOL OF PURE AND APPLIED BIOPHYSICS



Venice (Italy)- Palazzo Franchetti- 27-31 January 2020

# Applications of X-rays and Neutron Scattering in Biology

Scattering techniques based on X-rays and neutrons have proven to be two of the most powerful techniques for studying biological structures. At the interface between Biology, Physics and Chemistry, the school will survey recent advances of X-rays and neutrons techniques to probe the properties of biological structures, from both static and dynamic view-point. Combining theoretical and application lectures, the school will introduce the following topics: The physics of scattering, Neutron production and neutron facilities, X-ray production and X-ray facilities, Reflectometry, Small-angle Scattering, Crystal and powder diffraction, Inelastic scattering, X-ray absorption fine structure (XAFS), Imaging, XFEL in biology. Of note, in addition to lectures, a visit to the ELETTRA synchrotron in Trieste will allow students to perform practical activities in state-of-art instruments.

### SCIENTIFIC COORDINATORS:

Paolo Mariani - UNIVPM (Italy)  
Maria Grazia Ortore- UNIVPM (Italy)  
Francesco Spinozzi- UNIVPM (Italy)

### SPEAKERS:

Heinz Amenitsch (Graz, Austria)  
Fabio Bruni (Rome, Italy)  
Trevor Forsyth (Keele, United Kingdom)  
Giovanna Fragneto (Grenoble, France)  
Achille Giacometti (Venice, Italy)  
Irene Margiolaki (Patras, Greece)  
Paolo Mariani (Ancona, Italy)  
Claudio Masciovecchio (Triest, Italy)  
Silvia Morante (Rome, Italy)  
Maria Grazia Ortore (Ancona, Italy)  
Alessandro Paciaroni (Perugia, Italy)  
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Daniela Russo (Grenoble, France)  
Giorgio Schirò (Grenoble, France)  
Francesco Spinozzi (Ancona, Italy)  
Francesco Stellato (Rome, Italy)  
Giuliana Tromba (Triest, Italy)  
Beatrice Vallone (Rome, Italy)  
Martin Weik (Grenoble, France)  
Joseph Zaccai (Grenoble, France)

### DIRECTOR OF THE SCHOOL:

Giorgio GIACOMETTI- IVSLA and Uni. Padua (Italy)

### CO-ORGANIZED BY:



Società Italiana di Spettroscopia Neutronica



SOCIETÀ ITALIANA LUCE DI SINCROTRONE  
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