2. MEETING OF YOUNG BIOPHYSICISTS

November 13th 2026

Ruđer Bošković Institute, Zagreb
1st wing Lecture hall

PROGRAMME

08:30	**Registration**
09:00-09:15	**Opening & Welcome Remarks** **Anja Sadžak & Kristina Serec, Organizing Committee** **David M Smith, Director of the Ruđer Bošković Institute** **Nadica Ivošević DeNardis, President of the Croatian Biophysical Society**
09:15	**Invited lecture** **Dunja Šimičić, University of Zagreb School of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, USA** Magnetic resonance spectroscopy and its applications in brain tumor research
Molecular, Membrane & Cell Biophysics **Chairs: Marija Raguž & Anja Sadžak**	
09:45	**Lucija Brtan, University of Zagreb, Faculty of Science** Complementary biophysical approaches to thermal characterisation of PLA-active polyesterases
10:00	**Andrej Nikolić, Faculty of Biotechnology and Drug Development, University of Rijeka** Porphyrins as intrinsic probes of structure and self-association in conjugates of antimicrobial peptides
10:15	**Mateo Šerić, University of Split School of Medicine** Investigating buffer effects on electroformation of giant unilamellar vesicles from damp lipid films
10:30	**Vedrana Krajnović, Ruđer Bošković Institute** Elucidation of macroscopic and molecular properties of model Gram-positive and Gram-negative bacterial membranes using biophysical techniques
10:45	**Filip Putak, Ruđer Bošković Institute** Salinity and growth phase-dependent morphology of microalgae probed by AFM
11:00	**Dorijan Vulić, Ruđer Bošković Institute** A unified mechanochemical framework for amoeboid cell locomotion
11:15	**Coffee break**

Computational Biophysics I **Chair: Piotr Nowakowski**	
11:45	**Eva Knežević, University of Split, Faculty of Science** Stochastic modeling of chromosome segregation in fission yeast
12:00	**Maja Milas, Ruđer Bošković Institute** Rethinking cancer therapy on a computer: the role of cell mechanics in adaptive therapy
12:15	**Petra Grubišić, Institute of Physics / University of Zagreb, Faculty of Science** Fitting experimental CW-EPR spectra using EasySpin
Computational Biophysics II **Chair: Kristina Serec**	
12:30	**Mario Jurada, University of Zagreb, Faculty of Science** CG modelling of the *E. coli* cell envelope: from membrane construction to electroporation
12:45	**Boris Gomaz, University of Zagreb, Faculty of Science** Atomistic modelling of the *E. coli* cell envelope and DNA interactions with the outer membrane
13:00	**Matej Kožić, University of Zagreb, Faculty of Science** Spontaneous formation of a DNA-bilayer complex stabilizes an electroporation-induced membrane pore
13:15	**Lunch Break + Group Photo**
Applied Biophysics **Chair: Ida Delač & Kristina Serec**	
14:15	**Katarina Carmen Tomašić, University of Zagreb School of Medicine** X-ray fluoroscopy in interventional cardiology: radiation exposure and potential biological effects
14:30	**Andrea Christina Odermatt & Neva Crnković Hahn, University of Zagreb School of Medicine** Investigating the biological effects of ionizing radiation in blood
14:45	**Lukas Levanić, University of Zagreb, Faculty of Science** Laser-induced graphene for bioelectronic applications
15:00	**Karla Filipović, University of Zagreb, Faculty of Science** Adhesive-free sealing of glass lab-on-chip devices for neuronal connectivity studies using femtosecond laser welding
15:15	**Rea Boban, University of Zagreb, Faculty of Science** Towards integration of biomolecular motors with 2D solid-state nanopores
15:30	**Best Talk Awards & Meeting Closure** **Anja Sadžak & Kristina Serec**