

# African Biophysics Workshop on Experimental and Computational Sciences

## AN ICTP 60<sup>th</sup> ANNIVERSARY SATELLITE EVENT

### Description:

The aim of the workshop is to introduce researchers to the latest developments in molecular biophysics including structural biology, nano-biophysics, nano-biophysical medicine, single molecule approaches, to computational tools such as molecular modeling as well as advanced data analysis.

### MORE DETAILS:

Novel biophysical tools are transforming biological, agricultural and medical research. Besides having a great impact on basic research, it has also become a driving and innovative seed in the modern economic and industrial framework, particularly for health and biotechnology. In this school, students will be exposed to recent advances in experimental methods such as atomic-force microscopy and structural biology, as well as computational approaches within the common theme of drug-design and drug-delivery.

The structure of the workshop will be focused on a journal-club style where lecturers will deconstruct relevant topics with the goal of triggering discussions and interactions on open problems in the field.

### TOPICS:

- Chemical Physics of Molecules in Solution
- Molecular Modeling
- Free Energy Calculations
- Data and Statistical Analysis
- Mechanobiology
- Structural Biology

### SPEAKERS:

L. CASALIS, Elettra Sincrotrone Trieste, Italy  
S. BONELLA, EPFL, Switzerland  
A. HASSANALI, ICTP, Italy  
G. HOZANA, ICTP, Italy  
A. LAIO, SISSA, Italy  
M. MANNO, CNR Palermo, Italy  
R. MIGGIANO, UNIUPO, Italy  
S. ONESTI, Elettra Sincrotrone Trieste, Italy  
D. SHADRACK, dNMIST-Arusha, Tanzania



9 - 13 December 2024



Kigali, Rwanda at ICTP-EAIFR



Deadline:  
30 September 2024

### DIRECTORS:

L. CASALIS, Elettra, Italy  
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A. HASSANALI, ICTP, Italy  
A. LAIO, SISSA, Italy  
S. ONESTI, Elettra, Italy  
A. RODRIGUEZ, University of Trieste, Italy  
D. SHADRACK, University of Dodoma, Tanzania

### LOCAL ORGANISER:

Ali HASSANALI, ICTP, Italy

### FURTHER INFORMATION:



E-mail: [smr3973@ictp.it](mailto:smr3973@ictp.it)

Web: <http://indico.ictp.it/event/10515/>

Female scientists are encouraged to apply.

### GRANTS:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

