



מכון ויצמן למדע

WEIZMANN INSTITUTE OF SCIENCE

# International School on **BIOLOGICAL PHYSICS OF CELLS (PHYSCELL)**

📅 **September 11-12, 2022**

📍 **Schmidt Auditorium | Weizmann Institute of Science**

Modern research in cell biology requires strong underpinnings in the fundamental physical sciences (physics, chemistry, materials), which are at the heart of modern experimental and theoretical techniques. Following in the tradition of the previous international PhysCell (Physics of Cells) conferences, the next to be held at Ein Gedi, Israel, September 13-16, 2022, we are sponsoring a pedagogical School that precedes and will be coordinated with this conference.

The School is aimed at graduate students and postdocs, with tutorial lectures by international leaders in the field. The lectures will begin with the foundational physical science of both cell biology and of sophisticated imaging techniques, and lead to a discussion of current research.

**The School will be held over two full days with about seven hours of lecture per day, including the following topics representing both experimental and theoretical points of view:**

- **Intermolecular interactions of proteins in cells: conformations, activity and condensate formation**  
J. Howard | Yale University, H. Hoffman | Weizmann Institute of Science
- **Visualizing mesoscale cellular and sub-cellular structures**  
Y. Roichman | Tel Aviv University, M. Elbaum | Weizmann Institute of Science
- **Forces exerted by cells and tissues and how they are measured**  
C. Sykes | École Normale Supérieure
- **Cell membranes, channels and pumps determine cell shape and volume**  
P. Sens | Institut Curie
- **Soft nuclear physics of cells**  
J. Marko | Northwestern, Y. Garini | Technion - Israel Institute of Technology

## SPONSORS

- The Chorafas Institute for Scientific Exchange
- Ben May Center for Chemical Theory and Computation
- Center of Statistical Mechanics
- The Helen and Milton A. Kimmelman Center for Biomolecular Structure and Assembly
- Dept. of Chemical and Biological Physics
- Feinberg Graduate School
- Clore Center for Biological Physics



## ORGANIZING COMMITTEE

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Sam Safran, Weizmann Institute of Science



## CONFERENCE COORDINATOR & ACCESSIBILITY ISSUES

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## REGISTRATION AND HOUSING INFORMATION



<https://bit.ly/3qmiT3V>

## WEBSITE

[www.weizmann.ac.il/conferences/ISBP2022/](http://www.weizmann.ac.il/conferences/ISBP2022/)

## FOR INFORMATION ABOUT THE PHYSCELL CONFERENCE

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