

ASSEMBLING LIFE:

SYNTHETIC CELLS, DYNAMIC MATTER & MULTICELLULARITY

19 – 31 July 2027 | Cargèse, Corsica

Overview

This summer school aims at providing young researchers (**PhD students and postdocs**) a coherent and advanced training on the physics of complex and living matter. It will cover a broad range of systems, from molecular and colloidal assemblies and artificial cells to migrating cells, microbial collectives, developing tissues and bioinspired materials. This multiscale, cross-disciplinary approach is essential for understanding how molecular interactions give rise to cellular functions, how individual cells coordinate in collectives, and how tissues acquire emergent mechanical and dynamical properties.

Lecturers

Timo Betz, George August U. Göttingen (Germany)
Carles Blanch Mercader, Institut Curie (France)
Roberto Di Leonardo, La Sapienza U. of Rome (Italy)
Zvonimir Dogic, UCSB (USA)
Carla Fernandez-Rico, ISTA (Austria)
Mazi Jalaal, U. of Amsterdam (Netherlands) & U. of Cambridge (UK)
Karine Guevorkian, Institut Curie (France)
François Peaudecerf, Institut de Physique de Rennes (France)
Francesco Picella, Sorbonne U. (France)
Léa-Laetitia Pontani, Sorbonne U. (France)
Manu Prakash, Stanford U. (USA)
Núria Ros I Rocher, Institut Pasteur (France)
Jennifer Ross, Syracuse U. (USA)
Jennifer Schwarz, Syracuse U. (USA)
Eleonora Secchi, ETH Zürich (Switzerland)
Olivier Theodoly, Aix-Marseille U. (France)
Kirsty Wan, U. of Exeter (UK)

Topics

Molecular Building Blocks, Artificial Cells & Biohybrid Systems

Intracellular Dynamics, Organization & Signaling

Single-cell Locomotion & Mechanics

Single-cell Collective Behavior

Multicellularity, Tissue Emergence & Morphogenesis

Bioinspired Functional Materials

Hands-on activities | Oral/Poster presentations by participants

Abstract submission

The online form can be found at:
https://assemblinglife.sciencesconf.org
Applications deadline: **December 8th, 2026**.
The full cost per participant includes housing, breakfast and lunch, and is specified on the school's website.
Fellowships available.

Organizers and contact

Wylie AHMED · Antoine ALLARD · Laura ALVAREZ
Efe ILKER · Hélène de MALEPRADE · Giulia PISEGNA
Feng-Ching TSAI

To contact the organizers:
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