

A PALM international summer school

Physical approaches to understanding microbial life

2018 August 28th
September 06th



Gif-sur-Yvette (south of Paris), France

66

Physical approaches promise new discoveries and understanding of microbial life. Recent progress made in different fields of theoretical physics, combined with the accelerating developments of new experimental instruments and data analysis techniques, is leading to the emergence and development of a new scientific community at the interface of physics and microbiology. This PALM international and multidisciplinary summer school aims to provide a comprehensive overview of the current progress, and to stimulate further interactions and collaborations.

99

Selected topics:

Cell and colony **motility** and **mechanics**, cell and molecular **transport**, consequences of **non-equilibrium**, metabolism and **growth**, single and multispecies populations, **evolution**, **adaptation**, biofilms, signaling and **sensing**.

Invited lecturers:

- Rosalind **ALLEN** (Edinburgh, UK)
- Harold **AURADOU** (Paris-Saclay, FR)
- Bonnie **BASSLER** (Princeton, US)
- Romain **BRIANDET** (Jouy-en-Josas, FR)
- Marco **COSENTINO LAGOMARSINO** (Paris Centre, FR)
- Nicolas **DESPRAT** (Paris Centre, FR)
- Jean-Marc **GHIGO** (Paris, FR)
- Raymond **GOLDSTEIN** (Cambridge, UK)
- KC **HUANG** (Stanford, US)
- Terry **HWA** (San Diego, US)
- Edo **KUSSELL** (New York, US)
- Christian **MARLIÈRE** (Paris-Saclay, FR)
- Bianca **SCLAVI** (Paris-Saclay, FR)
- Agnese **SEMINARA** (Nice, FR)
- Victor **SOURJIK** (Marburg, GER)
- Howard **STONE** (Princeton, US)
- Aleksandra **WALCZAK** (Paris Centre, FR)

<http://microbes.sciencesconf.org/>

microbes.lps@u-psud.fr

Organizers

Pietro **CICUTA**, Cambridge (UK)
Knut **DRESCHER**, Marburg (GER)
Eric **RASPAUD**, Orsay (FRA)

Administration

Sabine **HOARAU** & Sarah **GARÇON** (assistance & secretary)
Sandrine **ERMISSE** & Pouneh **MILANIAN** (financial management)



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