

# Spring College on the Physics of Complex Systems



**21 February - 18 March 2022**  
**An ICTP Virtual Meeting**  
**Trieste, Italy**

Further information:  
<http://indico.ictp.it/event/9774/>  
[smr3690@ictp.it](mailto:smr3690@ictp.it)

ICTP and SISSA, in collaboration with the partner institutions of the International Master Course in Physics of Complex Systems, are organizing the Spring College on the Physics of Complex Systems from 21 February to 18 March 2022.

## Description:

Many complex systems in physics, biology, engineering and economics are characterised by a large number of interacting degrees of freedom, giving rise to a non-trivial collective behaviour.

The theoretical and computational tools for a quantitative analysis of complex systems are often rooted in modern theoretical physics.

The Spring College on the Physics of Complex Systems aims to expose students to a selection of topics at the forefront of research during an intensive, 4-week programme. It consists of 5 courses.

The Spring College is part of the Master programme in the Physics of Complex Systems. The 2022 Spring College will be held online, with limited in person participation by invitation, and it is open to qualified Master and PhD students.

## Directors:

A. BRAUNSTEIN, Politecnico di Torino, Italy  
M. MARSILI, ICTP, Italy  
A. ROSA, SISSA, Italy

## Local Organiser:

M. MARSILI, ICTP, Italy

## Lecturers and Courses:

J.S. WEITZ, Georgia Tech, USA  
"Quantitative viral dynamics"

D. WOLPERT, Santa Fe Institute, USA  
"Stochastic thermodynamics and Computation"

T. SHARPEE, Salk Institute, USA  
"Hyperbolic geometry and information maximization in biological circuits"

S. RUFFO, SISSA, Italy & N. DEFENU, ETH Zurich, Switzerland  
"Statistical mechanics of long-range interacting systems"

F. CECCONI & A. VULPIANI, La Sapienza, Italy  
"Chaos: From Simple Models to Complex Systems"

## How to apply:

Online application:  
<http://indico.ictp.it/event/9774/>

Female scientists are encouraged to apply.

## Registration:

There is no registration fee.



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