Youth in High-Dimensions

ICTP

15 - 18 June 2021
An ICTP Virtual Meeting
Trieste, Italy

Further information:
http://indico.ictp.it/event/9596/
smr3602@ictp.it

The aim of the conference is to give young researchers the opportunity to present their results related to high-dimensional statistical problems, as arising in machine learning, inference or statistical physics.

Description:

Typical problems in high-dimensions include the detection and estimation of noisy signals (compressed sensing, PCA and tensor decomposition etc), the analysis of (deep) neural-networks and their learning and generalization dynamics, the detection of communities in large networks, or disordered spin systems. While these problems may seem of different natures, they actually share many similarities in their common phenomenology and the tools used to analyze them.

The core of the field is made of a very active, diverse and quickly expanding community of physicists, computer scientists, mathematicians, information theorists and engineers, with the common desire to tackle increasingly challenging problems at the forefront of data science.

This conference aims at reinforcing the links among this interdisciplinary community, and in particular of its youngest theory-oriented members, and to bring forward the latest development happening in the high-dimensional world.

Topics:

- Machine learning
- High-dimensional statistics
- Applied maths
- Computer sciences

Directors:

M. GABRIÉ, NYU / Flatiron
S. GOLDT, SISSA, Italy
M. MONDELLI, IST Austria, Austria

Local Organiser:

J. BARBIER, ICTP, Italy

Speakers:

L. BENIGNI, University of Chicago, USA
M. CELENTANO, Stanford University, USA
L. CHIZAT, University of Paris-Saclay, France
S.Y. CHUNG, Massachusetts Institute of Technology, USA
E. DOBRIBAN, University of Pennsylvania, USA
Z. FAN, Yale University, USA
C. GERBELOT, ENS Paris, France
A. GLIELMO, SISSA, Italy
A. INGROSSO, ICTP, Italy
A. JACOT, EPFL, Switzerland
F. MASTROGIUSEPPE, University College London, UK
F. MIGNACCO, IPHT Saclay, France
T. MISIAKIEWICZ, Stanford University, USA
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M. REFINETTI, ENS Paris, France
C. RUSH, Columbia University, USA
T. SCHRAMM, Stanford University, USA
S. VILLAR, Johns Hopkins University, USA
I. ZADIK, New York University, USA
J. ZARKA, ENS Paris, France

How to apply:

Online application:
http://indico.ictp.it/event/9596/

Female scientists are encouraged to apply.

Registration:

There is no registration fee.

Deadline:

15 June 2021

ICTP
The Abdus Salam
**International Centre
for Theoretical Physics**

www.ictp.it
Trieste, Italy