

# Ethical and Societal Challenges of Machine Learning



**7-11 November 2022**  
**An ICTP Virtual Meeting**  
**Trieste, Italy**

Further information:  
<http://indico.ictp.it/event/9839/>  
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From helping farmers adapt to climate change to predicting disease outbreaks, scientists in developing countries have begun turning to ML for more effective solutions. With this potential, however, comes the possibility for abuse, misuse, and unintended consequences.

## Topics:

- Embedding Ethics Education in Machine Learning: case studies from various parts of the world that demonstrate the need for a wider perspective on ML ethical challenges.
- Big data, privacy and democracy: ethical questions linked with big data exploitation, privacy and the dangers for democracy.
- Machine Learning, bias and fairness: problems of ML amplified bias, and some of the possible solutions.
- Diversity in ML: causes and impact of this lack of diversity, and some of the success stories that demonstrate how diverse teams are more successful.
- Impact of new technologies: impacts of novel technologies like TinyML and global satellite-enabled internet services, especially on people in least developed countries.

## Directors:

T. SCANTAMBURLO, Ca' Foscari University of Venice, Italy  
R. TROTTA, SISSA, Italy and Imperial College London, UK  
A. CELANI, ICTP, Italy  
M. MARSILI, ICTP, Italy  
M. ZENNARO, ICTP, Italy

## Local Organiser:

M. ZENNARO, ICTP, Italy

## Keynote Speakers:

P. AHRWEILER, Johannes Gutenberg University Mainz, Germany  
D. HUYSKES, Privacy Network, Italy  
S. KENNEDY, Santa Clara University, USA  
A. LAWRENCE, Institute for Astronomy, UK  
M. ROVERI, Politecnico di Milano, Italy  
V. SCHIAFFONATI, Politecnico di Milano, Italy

## How to apply:

Online application:  
<http://indico.ictp.it/event/9839/>

Female scientists are encouraged to apply.

## Registration:

There is no registration fee.

## Deadline:

**27 October 2022**



The Abdus Salam  
International Centre  
for Theoretical Physics  
[www.ictp.it](http://www.ictp.it)  
Trieste, Italy

