ICFO

# AI SESSION SERIES: A Researcher in an AI-Driven World

## GIOVANNI VOLPE

April 25, 2024
11:00
Auditorium

This event will delve into the realm of AI and its implications for researchers, starting with an **introduction** by **Prof. Dr. Frank Koppens**, setting the stage for the **seminar** led by **Prof. Dr. Giovanni Volpe**, followed by an **open discussion** on the topic.
During the seminar, Prof. Volpe will explore various dimensions of **AI**, encompassing its **historical context** and its **practical applications** in **data classification**, **fitting**, and **data generation**. Furthermore, he will discuss the dynamic **interplay between AI and human researchers**, while discussing the **evolving role of AI researchers**. Emphasis will be placed on the aspects of meaning and validation within this context.
The seminar will be followed by an open discussion on the topic.
**Giovanni Volpe** is a Full Professor at the Physics Department of the University of Gothenburg University, where he leads the Soft Matter Lab (http://softmatterlab.org) - and an ICFO alumnus. His research interests include soft matter, optical trapping and manipulation, statistical mechanics, brain connectivity, and machine learning. He has authored more than 100 articles and reviews on soft matter, statistical physics, optics, physics of complex systems, brain network analysis, and machine learning. He is co-authoring the upcoming book "Deep Learning Crash Course" (No Starch Press, San Francisco, 2024). He has developed several software packages for optical tweezers (OTS - Optical Tweezers Software), brain connectivity (BRAPH-Brain Analysis Using Graph Theory), microscopy enhanced by deep learning (DeepTrack), and deep learning (deeplay). He is cofounder of the start-up companies Lucero Bio, IFLAI, and NanosensorID.
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