IT Talks

A SEMINAR SERIES FOR PHD STUDENTS IN INFORMATION TECHNOLOGY

Presentation 1
Lisa Piccinin: **An incentive-based framework to nudge the adoption of sustainable technologies.**
In recent years, fostering the adoption of new technologies has become increasingly important, especially as society faces the pressing challenge of climate change. Despite the potential benefits that many green solutions offer, widespread adoption still faces the resistance of individuals. Indeed, people may express doubt towards innovation, particularly when it requires disrupting long-standing routines as they seek the comfort of established habits. To address these challenges, effective policies must be carefully designed to promote the adoption of new technologies. Moreover, designing such policies requires accounting for social interactions, individual characteristics, and how policies shape beliefs.
In this context, combining opinion dynamics and control theory provides a systematic framework to analyze how opinions evolve and to optimally design incentives. Accordingly, we develop an opinion dynamics model that captures the impact of different policies on technology adoption and integrate it with an optimal control approach to efficiently allocate resources.

Presentation 2
Davide Raffaelli: **Learning-based decisions for financial applications.**
This research focuses on the analysis and modeling of high-frequency limit order book data, with the objective of developing learning-based methodologies that account for the strong nonstationarity and uncertainty inherent in modern electronic markets. I investigate a range of modeling approaches, including point process models such as Hawkes processes and techniques inspired by complex systems, to capture the dynamic interactions governing order flow and price formation. Through the combination of data-driven learning methods and structure-aware models, my work aims to improve the understanding and prediction of short-term market dynamics.

Pitch
Giovanni Indino

The event will be followed by a networking aperitif.

10th February
11:30 - 13:00 pm
Emilio Gatti Room,
Building 20

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