



**POLITECNICO**  
MILANO 1863

DIPARTIMENTO DI ELETTRONICA  
INFORMAZIONE E BIOINGEGNERIA

**MARIO ZANON**

IMT SCHOOL OF ADVANCED STUDIES, LUCCA

# SAFE, STABLE AND EXPLAINABLE REINFORCEMENT LEARNING

This seminar explores how to combine Reinforcement Learning (RL) and Model Predictive Control (MPC) to achieve safe and explainable RL. While RL excels in optimal control but lacks explainability and guarantees, MPC provides strong theoretical assurances but struggles with model inaccuracies. By integrating their strengths, the seminar aims to enhance both safety and interpretability in RL-based control systems.

**3 March 2025 | 2:00 p.m.**

**Alpha Room  
Building 24**

Contacts:

[lorenzo.fagiano@polimi.it](mailto:lorenzo.fagiano@polimi.it)