Welcome to the new Ph.D. students (9:30-9:45)

Each PhD student of cycles XXXIV and XXXV delivers a short presentation:

**Physical Sciences for Engineering (9:45-10:30)**
- 09:45 GAYAN WADUMESTHREE (1st year)
  
  Growth and characterization of one dimensional TiO$_2$ and Co$_3$O$_4$ metal oxide nanostructure-based chemical sensors
- 10:00 GIOVANNI COSTANTINI (1st year)
  
  Deep Learning applications to particle physics
- 10:15 GIORGIO DUINA (2nd year)
  
  Fabrication and characterization of metal-oxide nanostructure-based chemical sensors

**Telecommunication Engineering (10:30-12:00)**
- 10:30 MARCO COMINELLI (1st year)
  
  Attacking and Defending Location Privacy With Wireless Protocols
- 10:45 STEFANO DELLA FIORE (1st year)
  
  New upper bounds for perfect k-hashing and 2-separable codes
- 11:00 MARCELLO ZANARDELLI (1st year)
  
  Image forgery detection: authentication of images through passive methods
- 11:15 ALESSANDRO GALEAZZI (2nd year)
  
  Human Behavior in online social media
- 11:30 MARCO LOMBARDI (2nd year)
  
  Leverage on deep-learning methods to improve 3D registration pipeline with a handheld scanner
- 11:45 ROBERTO MODONESI (2nd year)
  
  Efficient transmission of information over single and parallel AWGN channels

LUNCH BREAK (12:00-14:00)

**Computer Science/Engineering - Control Systems (14:00-15:15)**
14:00  NICOLA BERTOGLIO (2nd year)
Discrete-Event systems: model-based reasoning and diagnosis

14:15  MATTEO OLIVATO (2nd year)
Machine Learning methods for prognosis prediction in Covid-19 patients from laboratory test and X-ray data

14:30  LEONARDO LAMANNA (1st year)
Integrating planning and learning in dynamic and unknown environments

14:45  DIEGO LORENZI (1st year)
A new closed-loop control algorithm for die casting machines

15:00  MATTEO ZUBANI (1st year)
Development of chatbot for an e-learning platform

Physical Sciences for Engineering (15:15-15:30)

15:15  GIAMMARCO ROINI (1st year)
Synthesis and Characterization of Halide-Peroivskites for Nanophotonics