



## PhD Program in Information Engineering

# DRII Open Seminar Day

November 25, 2020, 9:30-16:00, <https://meet.google.com/nqq-tsxp-dwy>

### ■ 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 (1<sup>st</sup> year)

*Growth and characterization of one dimensional TiO<sub>2</sub> and Co<sub>3</sub>O<sub>4</sub> metal oxide nanostructure-based chemical sensors*

10:00 GIOVANNI COSTANTINI (1<sup>st</sup> year)

*Deep Learning applications to particle physics*

10:15 GIORGIO DUINA (2<sup>nd</sup> year)

*Fabrication and characterization of metal-oxide nanostructure-based chemical sensors*

### ■ Telecommunication Engineering (10:30-12:00)

10:30 MARCO COMINELLI (1<sup>st</sup> year)

*Attacking and Defending Location Privacy With Wireless Protocols*

10:45 STEFANO DELLA FIORE (1<sup>st</sup> year)

*New upper bounds for perfect k-hashing and 2-separable codes*

11:00 MARCELLO ZANARDELLI (1<sup>st</sup> year)

*Image forgery detection: authentication of images through passive methods*

11:15 ALESSANDRO GALEAZZI (2<sup>nd</sup> year)

*Human Behavior in online social media*

11:30 MARCO LOMBARDI (2<sup>nd</sup> year)

*Leverage on deep-learning methods to improve 3D registration pipeline with a handheld scanner*

11:45 ROBERTO MODONESI (2<sup>nd</sup> 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 (2<sup>nd</sup> year)

*Discrete-Event systems: model-based reasoning and diagnosis*

14:15 MATTEO OLIVATO (2<sup>nd</sup> year)

*Machine Learning methods for prognosis prediction in Covid-19 patients from laboratory test and X-ray data*

14:30 LEONARDO LAMANNA (1<sup>st</sup> year)

*Integrating planning and learning in dynamic and unknown environments*

14:45 DIEGO LORENZI (1<sup>st</sup> year)

*A new closed-loop control algorithm for die casting machines*

15:00 MATTEO ZUBANI (1<sup>st</sup> year)

*Development of chatbot for an e-learning platform*

## ■ **Physical Sciences for Engineering (15:15-15:30)**

15:15 GIAMMARCO ROINI (1<sup>st</sup> year)

*Synthesis and Characterization of Halide-Perovskites for Nanophotonics*