



DETAILS

# W PitchD

## the PhD's pitch

Our PhD members explain to students, colleagues and professors...



DETAILS



Politecnico di Torino - Maxwell Room  
11th April 2024 - 5.00 PM

## Cross-Domain Egocentric Action Recognition

**Ms. Chiara Plizzari, PhD Candidate, DAUIN.**



Egocentric action recognition, increasingly explored due to popular wearable cameras, faces a major unsolved issue: environmental bias. This bias emerges from networks relying on familiar surroundings, hindering recognition in new environments. The presented solutions involve using diverse video information channels and event data to mitigate domain shifts.

## MMIC Doherty Power Amplifiers: achieving wideband real-case scenario performance for small-cell type 5G base stations

**Ms. Giulia Bartolotti, PhD Candidate, DET.**

Although there are in the literature single-stage demonstrators of hybrid Doherty Power Amplifiers with excellent bandwidths, they have limited gain far from real scenarios. This research activity applies wideband single-stage solutions to a two-stage integrated PA targeting real-case scenario power and gain while maintaining wideband capabilities.



## Continuous-time Sigma-Delta modulator with a Digital-based Floating-Inverter (FI) Integrator

**Mr. Hossein Firouzkouhi, PhD Candidate, DET.**

This project focuses on the design and simulation of an ultra-low-power digital-based continuous-time 1st order Sigma-Delta modulator for sub-kHz bandwidth in IoT applications. It emphasizes digitization for efficiency, utilizing a floating-inverter-amplifier technique to achieve nano-Watt energy consumption. This innovative approach aims to enhance system performance by addressing analog-todigital interface challenges.



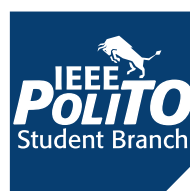
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