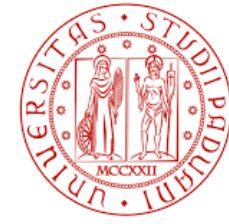


**PHD IN TECHNOLOGIES FOR
FUNDAMENTAL RESEARCH IN PHYSICS AND
ASTROPHYSICS**



**UNIVERSITÀ
DEGLI STUDI
DI PADOVA**

ELECTRONICS CURRICULUM

Students of the 41° cycle

Rubens Raffagnato - *Development of test systems for highly segmented silicon detectors for nuclear physics, astrophysics and particle physics* – University of Padua

Educational Offer A.Y. 2025/26

- **Advanced scientific programming in Matlab** (Prof. Paolo Bardella; Prof. Stefano Scialò – Politecnico di Torino)
- **Fundamentals of system engineering and project management for large scientific projects** (Dott. Marco Xompero; Dott. Runa Briguglio – INAF Arcetri)
- **HIGH-ENERGY PARTICLE PHYSICS DETECTORS IN SPACE** (Dott.ssa Serena Loporchio – University of Bari)
- **HE-5: Front-end and readout electronic systems for High Energy Astroparticle Physics** (Dott.ssa Felicia Barbato; Dott. Adriano di Giovanni – GSSI)
- **Rare event search with Noble Liquids** (Dott. Paolo Agnes – GSSI)
- **Cryogenics sensors for astroparticle physics** (Dott. Andrei Puiu – GSSI)
- **Cabling and Shielding for low noise applications** (Prof. Alberto Aloisio – University of Naples)
- **Programmable System on Chip (SoC) for data acquisition and processing** (Prof. Andrea Fabbri – University of Roma Tre)
- **Simulation of optical photon propagation for generic scintillator-based detectors** (Dott. Davide Serini – INFN Bari)
- **Advanced FPGA design and design management techniques** (Dott. Enrico Calore; Dott. Nicolo' Vladi Biesuz – INFN Ferrara)
- **Cosmic radiation and radiation hardness assurance** (Dott. Pierluigi Casolaro – INFN Napoli)
- **Laboratory of low-energy radiation measurement** (Dott. Andrei Puiu; Dott. Lorenzo Pagnanini – GSSI)
- **Microelectronics for radiation detectors II** (Dott. Giovanni Mazza – INFN Torino)