



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

PHD IN TECHNOLOGIES FOR FUNDAMENTAL RESEARCH IN PHYSICS AND ASTROPHYSICS

Curriculum: ELECTRONICS

- High-energy Particle Physics Detectors in Space
- HE-5: Front-end and readout electronic systems for High Energy Astroparticle Physics
- Cosmic radiation and radiation hardness assurance
- Rare event search with noble liquids
- Cryogenic sensors for Astroparticle Physics
- Low Energy Radiation Measurements (Lab Course)
- Cabling and Shielding for low noise applications
- Advanced scientific programming in Matlab
- Programmable System on Chip (SoC) for data acquisition and processing
- Fundamentals of system engineering and project management for large scientific projects
- Simulation of optical photon propagation for generic scintillator-based detectors
- Microelectronics for radiation detectors II
- Advanced FPGA design and design management techniques