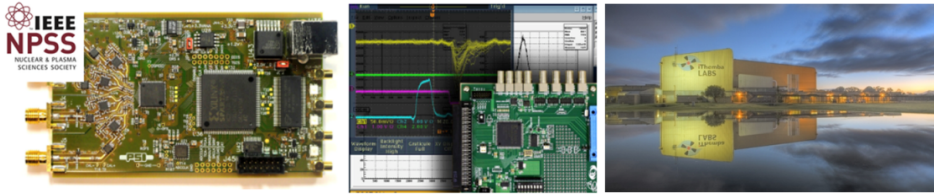


# IEEE NPSS International School for Real Time Systems in Particle Physics 2018



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## Silicon Detectors

*Monday 9 July 2018 13:00 (1h 30m)*

Silicon sensors are extensively used in various applications to image radiation. These applications range from experimental physics at colliders to medicine, biology, environmental monitoring and more. This two-hour lecture will cover several aspects of silicon radiation detectors ranging from fabrication, basic working principle, applications and aspects related to signal formation before and after irradiation. In particular, students should expect to learn about:

- Strip and Pixel sensors
- Hybridization
- Basics of Signal formation in silicon
- Basics of radiation effects in silicon devices -
- Examples of applications in High Energy Physics, medicine, environmental monitoring and more
- Novel technologies like micro-fabricated 3D sensors

**Presenter:** DA VIA, Cinzia (University of Manchester (GB))