Nuclear Physics meets Electronic Technology

17 -- 21 June 2024

Main Topics

Electronics and Devices

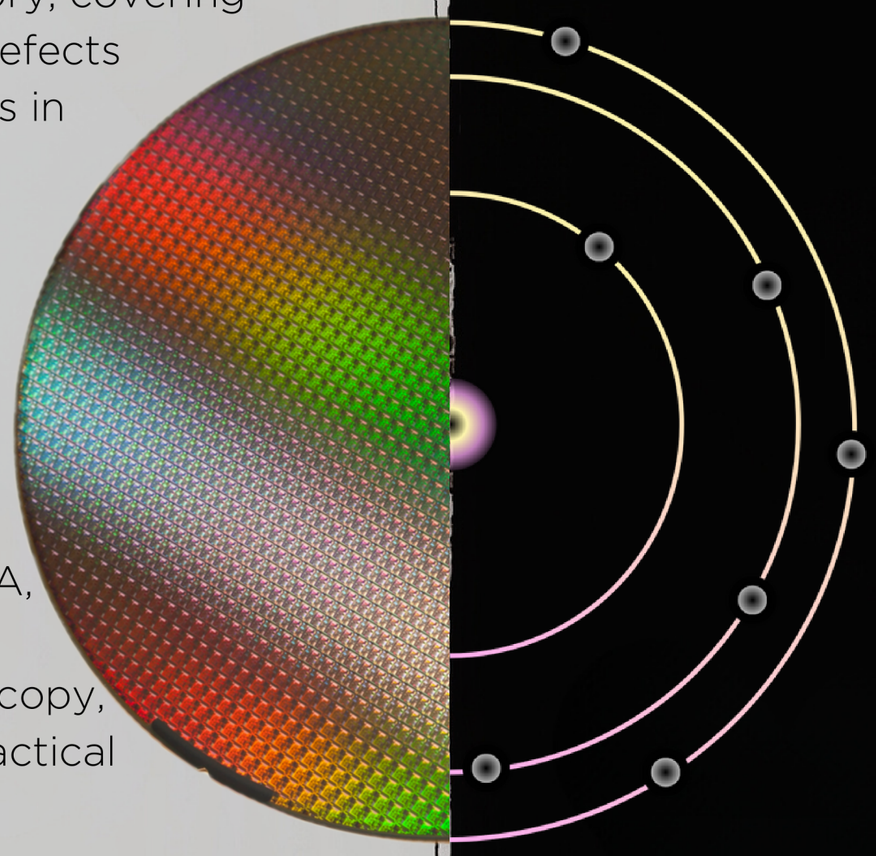
Introduction to electronic devices, doping, and defect-induced performance improvements. Includes high-energy particle interactions with semiconductors and radiation damage mitigation design.

Ion Implantation and Theory

In-depth study of ion implantation theory, covering the heavy-ion test, ionization energy, defects formation thresholds, nuclear processes in solids, chemical bonds, and electron screening.

Nuclear Probes: Theory and Experiments

Focus on nuclear and electric characterization techniques, featuring Ion Beam Analysis (SIMS, RBS, FIB, NRA, PIXE) and defect evaluation in semiconductors (Admittance Spectroscopy, DLTS, PL, EL, TPL, TRMC). Provides practical skills for advanced material analysis.



Local Committee

Raffaele Buompane
Università della Campania & INFN-Napoli

Virginia Boldrini
CNR-IMM Bologna

Nicola Casali (Chair)
INFN-Roma

Luigi Di Benedetto
Università di Salerno

Claudio Santonastaso
Università della Campania & INFN-Napoli

Main organizer

AS Be ST

A 7-Beryllium electron capture STudy for nuclear and solid state physics

In collaboration with

INFN LNGS

Università di Salerno Dipartimento di Ingegneria Industriale din

INFN ROMA

Lecturers

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Università La Sapienza, Roma IT
Edificio “Fermi” - Laboratorio di Calcolo
https://agenda.infn.it/event/38974

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Dipartimento di Matematica e Fisica

IMM Istituto per la Microelettronica e Microsistemi
Consiglio Nazionale delle Ricerche