

Thin LGADs characterization using Ion Beam Induced Charge (IBIC) and Time-resolved IBIC at the Centro Nacional de Aceleradores

Tuesday 6 June 2017 15:30 (20 minutes)

The National Accelerator Center (CNA) is a user's facility dedicated to multidisciplinary applications of particle accelerators. In this talk, the infrastructure available at CNA for Ion Irradiation and Characterization of Materials, based on a 3 MV tandem accelerator and a compact cyclotron for 18 MeV protons will be briefly described.

In addition, a new proposal in collaboration with IFCA and IMB-CNM will be presented. The main goal of this project is to carry out an IBIC and time-resolved IBIC (TRIBIC) characterization on a set of thin (50 μm) Low Gain Avalanche Detectors (strips and pixel detectors) to study with a good lateral resolution (4 μm) the gain in different zones of these devices. Of special interest will be to analyze the behavior of the detector response near the surface isolation (p-stop).

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Session Classification: Detectors with gain