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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 (4μm) 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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