

Measurements on 800 MeV proton irradiated diodes (moved to Thursday morning!)

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The radiation damage inflicted by protons of different energies leads to differences in the electrical properties of silicon sensors even at similar equivalent fluences. This work aims to understand the impact of radiation damage of protons of different energies. \\

Irradiations in the blue room of the LANSCE facility in Los Alamos with 800 MeV protons have been carried out on a set of Float Zone, Magnetic Czochralski and epitaxially grown Diodes. These materials had been under investigation within the RD50 collaboration before, and results of irradiations with 23 GeV protons from PS at CERN and 1 MeV neutrons in Ljubljana are available for comparison.\\

Within this year Brown University has build up a silicon laboratory for electrical sensor characterization. The recently build capacitance-voltage / current-voltage (CV/IV) setup has been used to characterize the proton irradiated samples. Results of the ongoing measurements are presented.

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