Measurements with Si detectors irradiated to extreme fluences

Wednesday, 20 November 2019 10:00 (20 minutes)

In this contribution measurements with detectors irradiated with reactor neutrons up to 1e17 n/cm2 will be presented. Measurements were made with CNM LGAD pad detectors made on 75 um thick epitaxial layer on low resistivity support silicon. LGADs were chosen because this was the available set of thin pad detectors that could withstand high bias voltages. Edge-TCT, charge collection with Sr-90 and detector current were measured under reverse and forward bias. Measurements were repeated after several annealing steps at 60 C.

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