

## Update on radiation hardness of Silicon Diodes for the future CMS High Granularity Calorimeter (HGCAL).

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The CMS collaboration is planning to upgrade the forward calorimeters as these will not be sufficiently performant with the expected HL-LHC (High Luminosity LHC) conditions. After CMS committee decision, the High Granularity Calorimeter (HGC) is the technology chosen for this upgrade. It is realized as a sampling calorimeter with layers of silicon detectors that feature very high longitudinal and lateral granularities, and a coarser segmentation backing hadronic calorimeter based on scintillators as active material. The sensors are realized as pad detectors of size in the order of 1 cm<sup>2</sup> with an active thickness between 100μm and 300μm depending on the position respectively the expected radiation levels. After the first results on neutron irradiation of 300μm, 200μm and 100μm n-on-p and p-on-n devices that have been irradiated to fluences up to 1.5E16 n/cm<sup>2</sup> at Ljubljana Nuclear Reactor; We present, the latest results in terms of radiation hardness of these pad detectors.

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