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IV-characterization of silicon sensors irradiated up to 2E16neq/cmˆ2

Thursday 3 December 2015 09:00 (20 minutes)

Miniature silicon strip detectors (˜1x1cm) with different thicknesses (50, 100, 150 and 300 μm) from Hamamatsu K.K. and Micron Semiconductor Ltd. were irradiated at Birmingham and Ljubljana with doses up to 2E16 neq/cmˆ2. IV measurements were performed at different temperatures for the determination of the effective energy Eeff and the current related damage rate α directly after irradiation and after room temperature annealing (10 days and 30 days). The results of these measurements performed at Liverpool will be presented in this talk.

A second set of sensors of the same type and irradiation campaign have been measured in Freiburg with a different set-up. These results will be shown by Moritz Wiehe at this workshop.

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