

IV-characterization of silicon sensors irradiated up to $2E16 \text{ neq/cm}^2$

Thursday, December 3, 2015 9:00 AM (20 minutes)

Miniature silicon strip detectors ($\sim 1 \times 1 \text{ cm}$) 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 $2E16 \text{ neq/cm}^2$. IV measurements were performed at different temperatures for the determination of the effective energy E_{eff} 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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