Combined Measurement Results of dedicated RD50 Charge Multiplication Sensors

Tuesday 4 June 2013 12:00 (20 minutes)

In this talk the combined results of dedicated charge multiplication sensors, produced by MICRON (UK) within the CERN RD50 framework, and measured at Freiburg and Liverpool are presented. The sensors vary in device thickness, in strip pitch and width as well as in diffusion times and energies for the implantation process. Some of the sensors have additional intermediate strips (biased or floating) between the readout strips. They were irradiate with neutrons to fluences of 1E15 and 5E15 1 MeV neq/cm². The collected charge is measured with the ALiBaVa setup to investigate the effect of charge multiplication for the different sensor geometries/properties.

Author: WONSAK, Sven (University of Liverpool (GB))

Co-authors: BETANCOURT, Christopher (Albert-Ludwigs-Universitaet Freiburg (DE)); FORSHAW, Dean Charles (University of Liverpool (GB)); CASSE, Gianluigi (University of Liverpool (GB)); JAKOBS, Karl (Albert-Ludwigs-Universitaet Freiburg (DE)); HAUSER, Marc Manuel (Albert-Ludwigs-Universitaet Freiburg (DE)); DERVAN, Paul (University of Liverpool (GB)); KODYS, Peter (Charles University (CZ)); KUEHN, Susanne (Albert-Ludwigs-Universitaet Freiburg (DE)); BARBER, Tom (Albert-Ludwigs-Universitaet Freiburg (DE)); PARZEFALL, Ulrich (Albert-Ludwigs-Universitaet Freiburg (DE)))

Presenter: WONSAK, Sven (University of Liverpool (GB))

Session Classification: Session 3: