

3rd Workshop on Advanced Silicon Radiation Detectors (3D and P-type Technologies)

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Calculations of 3D Weighting Field Profiles for 3D Detectors

Tuesday, 15 April 2008 17:30 (30 minutes)

Calculations of 3D weighting field profiles have been performed for 3 types of 3D detectors: single-type column, two-type columns, and double-sided two-type columns. It has been shown that for pitches less or equal to 50 μm , the weighting field distributes throughout the detector, with half of the maximum strength in the middle of the cell (between the 4 electrodes/columns). The main limiting factor for CCE seems to be the electric field instead.

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