

Beam test of 3D pixel detectors up to fluences of $9e15$ neq/cm²

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3D FEI4 pixel detectors from the IBL production were non-uniformly irradiated at CERN-PS with 23 GeV protons up to a maximum fluence of $9e15$ neq/cm². The devices have been studied in beam tests at CERN SPS and good efficiencies of >97% have been achieved at the highest fluence already at 170 V. Especially interesting is the option to study a vast range of fluences on a single pixel device due to the non-uniform beam profile. This presentation will give an overview on the achieved results.

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