## 4th Beam Telescopes and Test Beams Workshop 2016



Contribution ID: 31 Type: not specified

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

Thursday 4 February 2016 10:20 (20 minutes)

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.

Primary author: Mr FOERSTER, Fabian (IFAE Barcelona)

**Co-authors:** Mr VAZQUEZ, David (IFAE Barcelona); Mr CAVALLARO, Emanuele (IFAE Barcelona); Mr LOPEZ PAZ, Ivan (IFAE Barcelona); Dr LANGE, Joern (IFAE Barcelona); Prof. GRINSTEIN, Sebastian (IFAE Barcelona)

Presenter: Mr FOERSTER, Fabian (IFAE Barcelona)

Session Classification: Data analysis