



Preliminary Monte Carlo results on the 2015 test beam

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Overview

- Implementation of 2015 test-beam geometry, materials and beam in Geant4
- Energy deposition on silicon pads
- Energy deposition on silicon sensors
- Longitudinal shower development
- Conclusions



2015 Fcal TB geometry and materials in Geant4





2015 test-beam set-up in Geant4

Telescope: 6 plans

Tigger counters: 4 plans



Beam

- **-** e-, 5GeV
- uniform distribution of e- inside a rectangle: of 20 (horiz) x 10 (vert) mm²



An example of Geant4 event simulation



Energy deposition on silicon pads

ollaboration





Geant 4 simulation conditions

-PAI for the e+, e-, gamma interaction with silicon sensors and standard EM model for the interaction with tungsten plates and other materials

- Number of events 10000/configuration





Longitudinal shower development







Conclusions

- the geometry of 2015 TB was implemented in Geant4.
- It was simulated the energy deposition on every sensor pad
- It was determined the energy deposition on sensors/configuration
- It was determined the longitudinal shower development

