



Physics > Instrumentation and Detectors

Studies of Vertex Tracking with SOI Pixel Sensors for Future Lepton Colliders

Marco Battaglia, Devis Contarato, Peter Denes, Dietrich Liko, Serena Mattiazzo, Devis Pantano

(Submitted on 13 Apr 2012)

This paper presents a study of vertex tracking with a beam hodoscope consisting of three layers of monolithic pixel sensors in SOI technology on high-resistivity substrate. We study the track extrapolation accuracy, two-track separation and vertex reconstruction accuracy in pion-Cu interactions with 150 and 300 GeV/c pions at the CERN SPS. Results are discussed in the context of vertex tracking at future lepton colliders.

Comments: 15 pages, 8 figures, submitted to Nuclear Instruments and Methods A

Subjects: **Instrumentation and Detectors (physics.ins-det)**; High Energy Physics - Experiment (hep-ex)

Cite as: [arXiv:1204.2910v1](#) [physics.ins-det]

Submission history

From: Marco Battaglia [[view email](#)]

[v1] Fri, 13 Apr 2012 08:05:05 GMT (46kb)

[Which authors of this paper are endorsers?](#)

Link back to: [arXiv](#), [form interface](#), [contact](#).

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

physics.ins-det

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1204](#)

Change to browse by:

[hep-ex](#)

[physics](#)

References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))

