

Silicon Detectors in Particle Physics –from Strip Detectors to Medipix

Wednesday 12 July 2006 14:00 (1h 45m)

Semiconductor detectors for particle tracking and vertex finding have started to play an important role in High Energy Physics roughly since the LEP era. Present experiments at the Large Hadron Collider (LHC) or Tevatron would be impossible with Silicon detectors around the interaction point.

This lecture gives an introduction to the topic, starting from the fundamental operating principles of semiconductor detectors, and leading up to the detectors used in the tracking systems of the LHC experiments. Applications of detectors from particle physics in other fields are shown, using the Medipix chip as an example.

Author: PARZEFALL, Ulrich (Fakultaet fuer Physik)

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