Contribution submission to the conference Mainz 2012

OLYMPUS tracking — •AXEL SCHMIDT for the OLYMPUS-Collaboration — Massachusetts Institute of Technology, Cambridge, MA, USA

The OLYMPUS Experiment, underway at DESY, in Hamburg, Germany, is measuring the cross-section ratio between electron and positron elastic scattering from protons to definitively determine the two-photon contribution to lepton-proton scattering. Elastic events are selected by tracking the outgoing leptons and protons with a large acceptance magnetic spectrometer to determine the scattering angles, momenta, and vertex. Two large drift chambers each with 18 planes of sense wires are used to determine the particle trajectories. Hits in each sense wire plane are combined to form a three dimensional track through the detector. The design of the OLYMPUS drift chambers, as well as a description of the track reconstruction will be presented.

Part: HK

Type: Vortrag; Talk

Topic: Hadronenstruktur und -spektroskopie

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