



Contribution ID: 94

Type: oral presentation

The Crystal-Barrel/TAPS-Experiment at ELSA

Friday, May 30, 2008 12:41 PM (15 minutes)

Summary

One aim of the Crystal-Barrel-Experiment is to gain a detailed knowledge on the spectrum and the properties of baryon resonances to contribute to a better understanding of strong QCD in the non-perturbative regime. The experimental setup includes three different φ -symmetric calorimeters covering almost the complete solid angle. The Crystal-Barrel/TAPS detector system together with a polarized target and a linear or circular polarized photon-beam, allows in addition to the measurement of cross sections also the measurement of double-polarisation observables. Resonances up to masses of 2.5-GeV can be investigated.\

In the talk the readout system of the two CsI(Tl) calorimeters will be discussed as well as their performance including the time-, energy-resolutions reached and their charge identification capabilities.\

While Crystal-Barrel-Calorimeter is presently read out with photodiodes, the Forward-Detector features a photomultiplier readout including an online cluster finder for first-level-triggering. For the future it is planned to improve the trigger capabilities of the Crystal-Barrel-Calorimeter, presently included in the second level trigger only; two options, APDs and SiPMs, will be discussed.

Primary author: Mr WENDEL, Christoph (HISKP Universität Bonn)

Presenter: Mr WENDEL, Christoph (HISKP Universität Bonn)

Session Classification: Operating Calorimeters

Track Classification: Operating Calorimeters