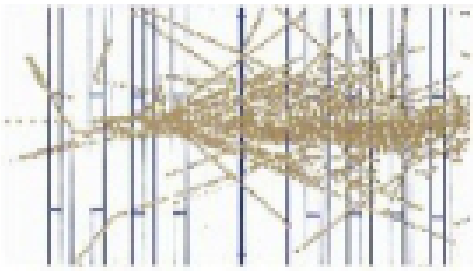

Contribution ID: **94** Type: **oral presentation**

The Crystal-Barrel/TAPS-Experiment at ELSA

Friday, 30 May 2008 12:41 (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 addtion 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 capabilties of the Crystal-Barrel-Calorimeter, presently included in the
second level trigger only; two options, APDs and SiPMs, will be discussed.

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Session Classification: Operating Calorimeters

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