



Contribution ID: 92

Type: **Parallel**

## Strangeness photoproduction at the BGO-OD experiment

*Wednesday, 21 August 2019 11:10 (20 minutes)*

Hadron spectroscopy is used to investigate the degrees of freedom of the constituents of the nucleon. Since the conception of the quark model, there have been descriptions of baryons and mesons with more than three and two valence quarks respectively. Such hadrons could manifest as penta- and tetraquarks, or as meson-meson and meson-baryon molecular like states. Candidates for such exotic matter were found in recent years in the charm sector, and there is evidence that similar configurations may exist in the light, strange sector. To study such effects in photoproduction experiments, access to a low momentum exchange region, where the meson is produced at forward angles is crucial.

The BGO-OD experiment at the University of Bonn's ELSA accelerator facility in Germany is ideally suited for this endeavor. It combines a highly segmented BGO electromagnetic calorimeter at central angles and an Open Dipole magnetic spectrometer in the forward direction. This allows the detection of forward going kaons, and complex final states of mixed charge from hyperon decays.

New, key results in this low momentum exchange region indicate a cusp-like structure in the  $\gamma p \rightarrow K^+ \Sigma^0$  cross section at the  $\Lambda(1405)$  production threshold, and line shape measurements and differential cross sections for  $\Lambda(1405)$  photoproduction.

\*Supported by DFG (PN 50165297).

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**Session Classification:** Session 2: Baryon spectroscopy

**Track Classification:** Session 2: Baryon spectroscopy