

The A2 Crystal Ball and TAPS Program at MAMI

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The Crystal Ball 4π spectrometer was first installed at the A2 Tagged Photon Facility at the Mainz Microtron in Mainz, Germany in 2003. Since then, a series of highly successful experiments have been performed that study a spectrum of topics from the accurate determination of the η slope parameter to photon asymmetries in π^0 threshold photoproduction. The high quality of these results is made possible by the large solid-angle coverage of the combined Crystal Ball and TAPS spectrometers in conjunction with the Edinburgh Particle Identification Detector and two Multi-Wire Proportional Chambers from Pavia for charged particle identification and tracking. The successful upgrade of MAMI and the Glasgow Photon Tagger to 1.6 GeV has lead to an expansion of the program. More recently, a frozen-spin polarized proton target has been installed and double-polarization measurements have begun. An overview of the Crystal Ball experimental program will be described and a selection of preliminary results will be shown.

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