Diffractive and Coulomb Dissociation of pions into three charged pions at low momentum transfer at COMPASS

Stefanie Grabmüller[(a)] for the COMPASS collaboration

[(a)] Technische Universität München, Physik Department E18, 84748 Garching, Germany

COMPASS is a multi-purpose fixed-target experiment at CERN SPS, that investigates the structure and spectroscopy of hadrons. Dissociation of pions on nuclear or hydrogen targets provides clean access to the light meson resonance spectrum. During a short run with 190 GeV/c π^- beam on thin lead disk targets in 2004, about 4 million exclusive $\pi^-\pi^-\pi^+$ events have been collected. For the 3 million events with low momentum transfer $t' < 0.01(\mathrm{GeV}/c)^2$, coherent scattering off the nucleus as a whole can be assumed, with contributions from Reggeon, Pomeron and photon exchange. For the lowest $t' < 0.001\,(\mathrm{GeV}/c)^2$, the photo-produced part becomes apparent.
The status of the partial wave analysis of these data will be presented, discussing the overlap of diffractive and photo-production of the 3π events.
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E-mail: sgrabmue@e18.physik.tu-muenchen.de