Triangular singularity in the reaction $\gamma p \rightarrow p \pi^0 \eta$.*

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Collaboration

CBELSA/TAPS

Abstract content

It is shown that a triangular singularity [1-4] occurs in the reaction $\gamma p \to p\pi^0 \eta$ at incident photon energies in the range of 1300 - 1550 MeV. A Δ^* resonance populated in the reaction decays into an η and the $\Delta(1232)$ resonance which subsequently decays into a proton and a π^0 . If the π^0 is emitted collinear with the η meson it catches up with the η meson and rescatters. Experimental evidence for this process is discussed based on recent data on the $\gamma p \to p\pi^0 \eta$ reaction obtained by the CBELSA/TAPS collaboration.

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