

# Mathematical ambiguities in eta-pi photoproduction

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Mathematical ambiguities in partial wave analyses cause unavoidable problems in interpreting data from scattering experiments. These ambiguities appear as distinct sets of partial waves which can describe the same experimental data. In principle, these ambiguities may be resolved by leveraging knowledge about the physics of the process of interest, or by enforcing additional constraints. We will describe the resolution of mathematical ambiguities in the analysis of the photoproduction of spinless meson resonances, such as in  $\eta\pi$  photoproduction at GlueX. We will present some simulations and fits to toy data and discuss apparent ambiguities which might appear in fits to real data.

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