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Partial-wave analysis of $\gamma p \rightarrow \eta p$ and $\gamma p \rightarrow K^+\Lambda^1$ BRIAN HUNT, D.M. MANLEY, Kent State University — The goal of our research is to improve our knowledge of the properties of nucleon resonances using techniques of a multichannel partial-wave (PW) analysis. Currently many predicted resonances have yet to be found, while the properties of several known resonances are relatively uncertain. To resolve these issues, one must analyze photoproduction reactions, which help us to determine properties of resonances that decouple from the πN channel. The present work focuses on adding into a multichannel fit two such photoproduction reactions: $\gamma p \rightarrow \eta p$ and $\gamma p \rightarrow K^+\Lambda$. During this talk, preliminary results will be discussed that focus on the dominant PW contributions of each reaction, and how adding the photoproduction reactions has altered, and possibly improved, the multichannel hadronic fits.

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