# New $K^+\Lambda$ and $K^+\Sigma^0$ photoproduction results from CLAS and the search for missing baryon resonances

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**Abstract**

The CLAS Collaboration has recently published high-statistics and wide-kinematic coverage differential cross-section and recoil polarization results for the $K^+\Lambda$ (PRC 81, 025201 (2010)) and $K^+\Sigma^0$ (PRC 82, 025202 (2010)) channels. These results incorporate an additional coverage of 300-MeV in $\sqrt{s}$ over previous results that will help elucidate the role of non-resonant $t$- and $u$-channel processes. Our polarization results ($P_\Lambda$, $P_\Sigma$) add significant precision and kinematic coverage over previously published results. The $SU(6)$ quark model prediction of $P_\Lambda \sim -P_\Sigma$ is seen to be valid in the high energy and forward-angle regime, but is found to be broken in some of the mid-angle bins. Prospects of a partial wave analysis and searches for missing baryon resonances using these latest CLAS results and other available polarization results will also be described.