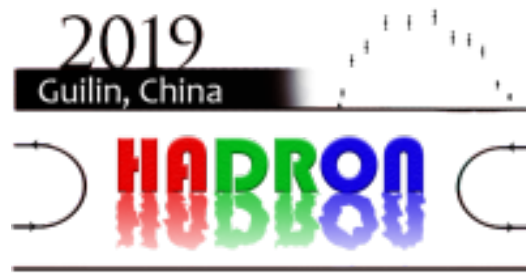


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## Study of baryon form factors at BESIII

*Saturday, August 17, 2019 2:30 PM (25 minutes)*

Electromagnetic form factors of baryons provide fundamental information about their structure and dynamics. They constitute a rigorous test of non-perturbative QCD as well as of phenomenological models. However, results in the time-like region have large uncertainties. The production cross section and form factors of hyperons are hardly explored. Based on  $500 \text{ pb}^{-1}$  of data collected with the BESIII detector between 2.0 GeV and 3.08 GeV, and data collected at the peak of the  $\psi(3770)$  resonance and higher energies, we report measurements of the proton form factor in the time-like region applying the energy scan method and the initial state radiation technique. In this talk, the line-shape of the Born cross sections of hyperon pairs for  $\Lambda$  and  $\Lambda_c$  baryons are included, where a non-zero cross section near threshold is discerned. The relative phase angle between electromagnetic form factors  $G_E$  and  $G_M$  of  $\Lambda$  is also reported.

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