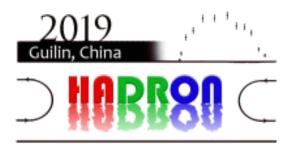
## XVIII International Conference on Hadron Spectroscopy and Structure (HADRON2019)



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## Identification of a visible narrow cusp structure in $\Lambda_c^+ \to p K^- \pi^+$

Tuesday, 20 August 2019 11:10 (20 minutes)

A resonance-like structure as narrow as 10 MeV is observed in the  $K^-p$  invariant mass distributions in  $\Lambda_c^+ \rightarrow pK^-\pi^+$ . This precise measurement is based on a data sample of about 1.5 million events, and the bin width of  $K^-p$  invariant mass is only 1 MeV. The narrow peak precisely lies on the  $\Lambda\eta$  threshold, because of which it is natural to identify it as a threshold cusp. Being different from the common two-body unitary cusp, we find that the narrowness of this cusp can be induced by a nearby triangle singularity of the  $\Lambda$ - $a_0^+(980)$  or  $\eta$ - $\Sigma(1660)$  rescattering process.

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