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Title:	Observation of $\Xi(1620)0$ and Evidence for $\Xi(1690)0$ in $\Xi+c \rightarrow \Xi-\pi+\pi+$ Decays
Authors:	Bhardwaj, V. (/jspui/browse?type=author&value=Bhardwaj%2C+V.)
Keywords:	Mass Measured Width
Issue Date:	2019
Publisher:	American Physical Society
Citation:	Physical Review Letters, 122(7).
Abstract:	We report the first observation of the double strange baryon $\Xi(1620)0$ in its decay to $\Xi-\pi+$ via $\Xi+c \rightarrow \Xi-\pi+\pi+$ decays based on a 980 fb ⁻¹ data sample collected with the Belle detector at the KEKB asymmetric-energy e ⁺ e ⁻ collider. The mass and width are measured to be 1610.4±6.0(stat)+6.1-4.2 (syst) MeV/c ² and 59.9±4.8(stat)+2.8-7.1(syst) MeV, respectively. We obtain 4.0σ evidence of the $\Xi(1690)0$ with the same data sample. These results shed light on the structure of hyperon resonances with strangeness S=-2.
URI:	https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.122.072501 (https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.122.072501) http://hdl.handle.net/123456789/2213 (http://hdl.handle.net/123456789/2213)
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