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Title:	Studies of charmed strange baryons in the ΛD final state at Belle
Authors:	Bhardwaj, V. (/jspui/browse?type=author&value=Bhardwaj%2C+V.)
Keywords:	Observation Decays Evidence
Issue Date:	2016
Publisher:	American Physical Society
Citation:	Physical Review D, 94(3).
Abstract:	We report the discovery of $\Xi_c(3055)0$, observed by its decay into the final-state $\Lambda D0$, and present the first observation and evidence of the decays of $\Xi_c(3055)+$ and $\Xi_c(3080)+$ into $\Lambda D+$. We also perform a combined analysis of the $\Lambda D+$ with the $\Sigma++cK-$ and Σ^++cK- decay modes to measure the ratios of branching fractions, masses and widths with improved accuracy. We measure the ratios of branching fractions $B(\Xi_c(3055)+\rightarrow\Lambda D+)/B(\Xi_c(3055)+\rightarrow\Sigma++cK-)=5.09\pm1.01\pm0.76$, $B(\Xi_c(3080)+\rightarrow\Lambda D+)/B(\Xi_c(3080)+\rightarrow\Sigma++cK-)=1.29\pm0.30\pm0.15$, and $B(\Xi_c(3080)+\rightarrow\Sigma^++cK-)/B(\Xi_c(3080)+\rightarrow\Sigma++cK-)=1.07\pm0.27\pm0.04$, where the uncertainties are statistical and systematic. The analysis is performed using a 980 fb^{-1} data sample collected with the Belle detector at the KEKB asymmetric-energy $e+e-$ collider.
Description:	Only IISERM authors are available in the record.
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