Title:	Search for Λ+c→ϕpπ0 and branching fraction measurement of Λ+c→K−π+pπ0
Authors:	Bhardwaj, V. (/jspui/browse?type=author&value=Bhardwaj%2C+V.)
Keywords:	Λ+c→ϕpπ0 Λ+c→K−π+pπ0 B(Λ+c→ϕpπ0)<15.3×10−5
Issue Date:	2017
Publisher:	APS
Citation:	Physical Review D, 96 (5)
Abstract:	We have searched for the Cabibbo-suppressed decay Λ+c→ϕpπ0 in e+e− collisions using a data sample corresponding to an integrated luminosity of 915 fb−1. The data were collected by the Belle experiment at the KEKB e+e− asymmetric-energy collider running at or near the Υ(4S) and Υ(5S) resonances. No significant signal is observed, and we set an upper limit on the branching fraction of B(Λ+c→ϕpπ0)<15.3×10−5 at 90% confidence level. The contribution of nonresonant Λ+c→K+K−pπ0 decays is found to be consistent with zero, and the corresponding upper limit on its branching fraction is set to be B(Λ+c→K+K−pπ0)NR<6.3×10−5 at 90% confidence level. We also search for an intermediate hidden-strangeness pentaquark decay P+s→ϕp. We see no evidence for this intermediate decay and set an upper limit on the product branching fraction of B(Λ+c→P+sπ0)×B(P+s→ϕp)<8.3×10−5 at 90% confidence level. Finally, we measure the branching fraction for the Cabibbo-favored decay Λ+c→K−π+pπ0; the result is B(Λ+c→K−π+pπ0)=(4.42±0.05(stat)±0.12(syst)±0.16(norm))%, which is the most precise measurement to date.
Description:	Only IISERM authors are available in the record.
URI:	https://journals.aps.org/prd/abstract/10.1103/PhysRevD.96.051102 (https://journals.aps.org/prd/abstract/10.1103/PhysRevD.96.051102) http://hdl.handle.net/123456789/1845 (http://hdl.handle.net/123456789/1845)
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