Title:	Measurements of isospin asymmetry and difference of direct CP asymmetries in inclusive B→Xsγ decays
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Keywords:	Isospin asymmetry Asymmetries Measurements
Issue Date:	2019
Publisher:	American Physical Society
Citation:	Physical Review D,99(3).
Abstract:	We report measurements of isospin asymmetry Δ0− and difference of direct CP asymmetries ΔACP between charged and neutral B→Xsγ decays. This analysis is based on the data sample containing 772×106B¯B pairs that was collected with the Belle detector at the KEKB energy-asymmetric e+e− collider. Using a sum-of-exclusive technique with invariant Xs mass up to 2.8 GeV/c2, we obtain Δ0−=[−0.48±1.49(stat)±0.97(syst)±1.15(f+−/f00)]% and ΔACP=[+3.69±2.65(stat)±0.76(syst)]%, where the last uncertainty for Δ0− is due to the uncertainty on the production ratio of B+B− to B0¯B0 in Υ(4S) decays. The measured value of Δ0− is consistent with zero, allowing us to constrain the resolved photon contribution in the B→Xsγ, and improve the branching fraction prediction. The result for ΔACP is consistent with the prediction of the SM. We also measure the direct CP asymmetries for charged and neutral B→Xsγ decays. All the measurements are the most precise to date.
Description:	Only IISERM authors are available in the record.
URI:	https://journals.aps.org/prd/abstract/10.1103/PhysRevD.99.032012 (https://journals.aps.org/prd/abstract/10.1103/PhysRevD.99.032012) http://hdl.handle.net/123456789/2247 (http://hdl.handle.net/123456789/2247)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

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