

1. Record Nr.	UNINA9910300396003321
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Titolo	Time-Dependent CP Violation Measurements : Analyses of Neutral B Meson to Double-Charmed Decays at the Japanese Belle Experiment // by Markus Röhrken
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-00726-2
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (205 p.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	530.1 539.7
Soggetti	Elementary particles (Physics) Quantum field theory Mathematical physics Physical measurements Measurement Elementary Particles, Quantum Field Theory Theoretical, Mathematical and Computational Physics Measurement Science and Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Doctoral thesis accepted by Karlsruhe Institute of Technology, Germany.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Theoretical Foundations -- The Belle Experiment -- Analysis Methods -- Reconstruction and Selection -- Branching Fraction Measurements -- Time-Dependent Measurements.
Sommario/riassunto	This thesis describes a high-quality, high-precision method for the data analysis of an interesting elementary particle reaction. The data was collected at the Japanese B-meson factory KEKB with the Belle detector, one of the most successful large-scale experiments worldwide. CP violation is a subtle quantum effect that makes the world look different when simultaneously left and right and matter and antimatter are exchanged. This being a prerequisite for our own world to have developed from the big bang, there are only a few experimental

indications of such effects, and their detection requires very intricate techniques. The discovery of CP violation in B meson decays garnered Kobayashi and Maskawa, who had predicted these findings as early as 1973, the 2008 Nobel prize in physics. This thesis describes in great detail what are by far the best measurements of branching ratios and CP violation parameters in two special reactions with two charm mesons in the final state. It presents an in-depth but accessible overview of the theory, phenomenology, experimental setup, data collection, Monte Carlo simulations, (blind) statistical data analysis, and systematic uncertainty studies.
