



Contribution ID: 1611

Type: Oral Presentation

Updates from UTfit on the Unitarity Triangle and D mixing analyses (15' + 5')

Friday, August 5, 2016 11:30 AM (20 minutes)

Flavour physics represents a unique test bench for the Standard Model (SM). New analyses performed at the LHC experiments are now providing unprecedented insights into CKM metrology and new evidences for rare decays. The CKM picture can provide very precise SM predictions through global analyses.

We present here the results of the latest global SM analysis performed by the UTfit collaboration including all the most updated inputs from experiments, lattice QCD and phenomenological calculations.

In addition, we update the analysis of D meson mixing including the latest experimental results. We derive constraints on the parameters M_{12} , Γ_{12} and Φ_{12} that describe D meson mixing using all available data, allowing for CP violation. We also provide posterior distributions for observable parameters appearing in D physics.

Primary authors: BEVAN, Adrian (University of London (GB)); SCHIAVI, Carlo (Universita e INFN Genova (IT)); DERKACH, Denis (Yandex School of Data Analysis (RU)); FRANCO, Enrico (INFN (Istituto Nazionale Fisica Nucleare)); PARODI, Fabrizio (Universita degli Studi e INFN Genova (IT)); MARTINELLI, Guido (Universita e INFN, Roma I (IT)); SILVESTRINI, Luca (INFN Rome); BONA, Marcella (Queen Mary University of London (UK)); CIUCHINI, Marco (INFN Sezione di Roma Tre); PIERINI, Maurizio (CERN); VAGNONI, Vincenzo (CERN and INFN Bologna); SORDINI, Viola (Universite Claude Bernard-Lyon I (FR)); LUBICZ, Vittorio (University of Roma Tre); STOCCHI, achille (LAL CNRS Universite Paris Sud); TARANTINO, cecilia (University Roma Tre)

Presenter: BONA, Marcella (Queen Mary University of London (UK))

Session Classification: Quark and Lepton Flavor Physics

Track Classification: Quark and Lepton Flavor Physics