Heavy Quarks & Leptons



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Unitarity Triangle Analysis within and beyond the SM

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We present the update of the Unitarity Triangle (UT) analysis performed by the UTfit Collaboration within the Standard Model (SM) and beyond. Within the SM, combining the direct measurements on sides and angles, the UT turns out to be over-constrained in a consistent way, with some tension due to recently included contributions to the theoretical prediction of \epsilon_K and the updated lattice average for B_K. Generalizing the UT analysis to investigate NP effects, constraints on b -> s transitions are also included and both CKM and NP parameters are fitted simultaneously. The most interesting result in this analysis is the hint of NP found in the B_s-\bar B_s mixing at the level of more than 2 sigma.

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