

## Updated determinations of $|V_{us}|$ with tau decays using the HFLAV fit

*Wednesday 29 September 2021 09:45 (20 minutes)*

We present updated determinations of  $|V_{us}|$  using tau decays that include a preliminary updated HFLAV global fit of the tau branching fractions, up-to-date lattice hadronic form factors and decay constants, and novel determinations published in 2019 of the electromagnetic and strong isospin-breaking corrections to the  $\pi^+ \rightarrow \mu^+ \nu[\gamma]$  and  $K^+ \rightarrow \mu^+ \nu[\gamma]$  leptonic decay rates obtained with lattice QCD+QED.

### What is your topic?

CKM matrix and Flavour Mixing

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