

Contribution ID: 653

Type: Plenary presentation

## Semileptonic $b \rightarrow u$ decays and $|V_{ub}|$

Tuesday, 27 July 2021 09:20 (20 minutes)

The Cabibbo–Kobayashi–Maskawa (CKM) matrix element  $|V_{ub}|$  describes the coupling between u and b quarks in the weak interaction, and is one of the fundamental parameters of the Standard Model.  $|V_{ub}|$  is the focus of a longstanding puzzle, as the world-average values derived from inclusive and exclusive B-meson decays show a tension of a few standard deviations.

Semileptonic decays can be used to extract CKM elements by combining a lattice QCD calculation of the form factors and the experimental branching fractions. This talk will focus on the recent lattice QCD results and the current status of  $V_{ub}$ .

Presenter: KOPONEN, Jonna (Universität Mainz)

Session Classification: Plenary