



Contribution ID: 237

Type: **not specified**

## Semileptonic $B$ decays and related study at Belle

*Thursday, 26 August 2021 16:00 (20 minutes)*

Though the Belle experiment has stopped data taking more than a decade ago, new results on  $B$  meson decays are still being obtained. This is in part due to new experimental tools elaborated for Belle II applied to the Belle data set, such as the FEI (Full Event Interpretation) hadronic and semileptonic tag which enables new measurements of  $B \rightarrow D^* \ell \nu$ ,  $B \rightarrow D^{**} \ell \nu$  and  $B \rightarrow X \ell \nu$ . Other analyses are motivated by the progress in theory such as the measurement of  $q^2$  moments in  $B \rightarrow X_c \ell \nu$ , which allows for a determination of  $|V_{cb}|$  up to the order  $1/m_b^4$ . The talk covers the study of semileptonic  $B$  decay results and related analyses, such as a new high-precision test of QCD factorisation with  $\mathcal{B}(\bar{B}^0 \rightarrow D^{(*)+} \pi^-)$  and  $\mathcal{B}(\bar{B}^0 \rightarrow D^{(*)+} K^-)$ , with Belle data set.

**Primary author:** KWON, Youngjoon (Yonsei University )

**Presenter:** KWON, Youngjoon (Yonsei University )

**Session Classification:** Flavor Physics and CP Violation

**Track Classification:** Flavor Physics and CP Violation