

# Precision measurement of the form factors of semileptonic charged kaon decays

*Saturday, 7 July 2018 12:00 (20 minutes)*

We present a measurement of the charged kaon semileptonic form factors based on 4.3 million  $K^\pm \rightarrow \pi^0 e^\pm \nu_e$  and 2.1 million  $K^\pm \rightarrow \pi^0 \mu^\pm \nu_\mu$  decays collected by the NA48/2 experiment. The single results for the semi-electronic and semi-muonic channel have better and similar precision, respectively, than previous measurements. The combination of both channels yields the most precise measurement of the form factors of semileptonic kaon decays.

**Primary authors:** LAZZERONI, Cristina (University of Birmingham (GB)); PIANDANI, Roberto (INFN Sezione di Pisa, Università e Scuola Normale Superiore, P)

**Presenter:** PIANDANI, Roberto (INFN Sezione di Pisa, Università e Scuola Normale Superiore, P)

**Session Classification:** Quark and Lepton Flavor Physics

**Track Classification:** Quark and Lepton Flavor Physics