

Precision measurement of the form factors of semileptonic charged kaon decays

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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)

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