



Contribution ID : 306

Type : Oral talk

## First measurement of the $K^\pm \rightarrow \pi^0 \pi^0 \mu^\pm \nu$ decay

*Wednesday, 30 November 2022 19:35 (15)*

The first observation of the decay  $K^\pm \rightarrow \pi^0 \pi^0 \mu^\pm \nu$  ( $K^0 \mu^4$ ) by the NA48/2 experiment at the CERN-SPS is reported. From 2437 selected signal candidates with 15% background contamination, the branching ratio of the decay is measured in the restricted kinematical space of the squared dilepton mass above  $0.03 \text{ GeV}^2/c^4$  and extrapolated to the full kinematical space. The result is found to be in agreement with the R form factor from 1-loop Chiral Perturbation Theory.

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**Session Classification** : High Energy Physics: Experiment

**Track Classification** : High energy physics: experiment