

## Recent results from the NA48 experiment at CERN

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The NA48/2 experiment presents a final result of the charged kaon semileptonic decays form factors measurement based on 4.28 million  $K_{\pm e3}$  and 2.91 million  $K_{\pm \mu 3}$  selected decays collected in 2004. The result is competitive with other measurements in  $K_{\pm \mu 3}$  mode and has a smallest uncertainty for  $K_{\pm e3}$ , that leads to the most precise combined  $K_{\pm l3}$  result and allows to reduce the form factor uncertainty of  $|V_{US}|$ . The NA48/2 experiment at CERN collected a very large sample of charged kaon decays into multiple final states. From this data sample we have reconstructed about 1500 events of the very rare decay  $K_{\pm} \rightarrow \mu^{\pm} \nu e^+ e^-$  over almost negligible background in the region with  $m(e^+e^-)$  above 140 MeV, which is of great interest in Chiral Perturbation Theory. We present the  $m_{ee}$  spectrum and a model-independent measurement of the decay rate for this region.

**Primary author(s)** : Mr. SHKAROVSKIY, Sergey (JINR, Dubna)

**Presenter(s)** : Mr. SHKAROVSKIY, Sergey (JINR, Dubna)

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