



## Rare kaon decay measurements with NA62/NA48 minimum bias data

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The NA62 (phase-I) experiment at CERN collected a large sample of charged kaon decays in 2007-2008, allowing one to study these decays with a high precision. The first result of the helicity-suppressed ratio  $R_K$  of the  $K_{\ell 2}$   $\rightarrow e^+ \nu$  and  $K_{\ell 2}$   $\rightarrow \mu^+ \nu$  decay measurement based on this sample is presented. The result is in agreement with the Standard Model expectation, and constrains two-Higgs-doublets extension of the Standard Model. The status of analyses of rare decay  $K_{\ell 3}$   $\rightarrow e \nu \gamma$  and very rare decay  $K_{\ell 3}$   $\rightarrow \pi^+ \pi^0 e^+ e^-$  collected with a low intensity beam and minimum bias trigger conditions in 2007, is presented as well. Using the minimum bias data of NA62 and the data of NA48/2 experiment collected with minimum bias trigger in 2004, a large sample of  $K_{\ell 3}$   $\rightarrow \pi \gamma \gamma$  decays has been selected and analyzed. This analysis led to a precision test of the Chiral Perturbation Theory. The NA62 experiment at CERN SPS (phase-II) aims to collect of the order of 100  $K_{\ell 3}$   $\rightarrow p+n$  events in two years of data taking, keeping the background at the level of 10%. The physics prospects and the status of the construction of the experiment will be presented.

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