Contribution ID: **69** Type: **not specified**

Measurement of the FCNC Decays K+- -> pi+- l+ l-

We report on measurements of the rare decays K+- -> pi+- e+ e- and K+- -> pi+- mu+ mu-. The full NA48/2 data set was analyzed, leading to more than 7200 reconstructed events in the electronic and more than 3000 events in the muonic channel, the latter exceeding the total existing statistics by a factor of five. For both channels the selected events are almost background-free. From these events, we have determined the branching fraction and form factors of K+- -> pi+- e+ e- using different theoretical models. Our results improve the existing world averages significantly. In addition, we measured the CP violating asymmetry between K+ and K- in this channel to be less than a few percent.

Primary author: Dr LAZZERONI, Cristina (University of Birmingham, UK)

Presenter: Dr LAZZERONI, Cristina (University of Birmingham, UK)

Track Classification: Poster session