



Contribution ID: 60

Type: **Oral**

## A novel $\mu$ to $3e$ experiment

*Thursday, 14 October 2010 12:20 (20 minutes)*

Design studies for an experiment searching for the lepton flavour violating decay  $\mu$  to  $3e$  are presented. The detector concept is based on thin layers of silicon sensors with fast readout. The aim is to reach an experimental sensitivity of  $1e-16$  for this process, which is an improvement by factor 10000 compared to the existing limit.

**Primary author:** Prof. SCHOENING, Andre (University Heidelberg, Institute of Physics)

**Co-authors:** Mr NARAYAN, Rohin (University Heidelberg, Institute of Physics); Dr BACHMANN, Sebastian (University Heidelberg, Institute of Physics)

**Presenter:** Prof. SCHOENING, Andre (University Heidelberg, Institute of Physics)

**Session Classification:** Session Th - 2

**Track Classification:** Low energy precision tests of the Standard Model