



Contribution ID: 71

Type: Oral

## In Search of $\mu \rightarrow e \gamma$ – The MEG Experiment Status & Latest Results

*Tuesday 12 October 2010 09:30 (30 minutes)*

The search for “New Physics” is not restricted to the high-energy frontier of TeV-scale accelerators. The MEG experiment at PSI, is a lepton-flavour violating decay search, aiming at  $O(10^{-13})$  sensitivity for the decay  $\mu \rightarrow e + \gamma$ . Using one of the most intense surface muon beams, together with the world’s largest liquid xenon photon detector of 900 litres and a gradient-field superconducting positron spectrometer, the decay of a muon to a photon and positron can be distinguished from the normal Michel decay and the prompt background process of radiative muon decay. To resolve the dominant background process of accidental overlapping events, a detector with excellent spatial, temporal and energy resolution is required. The current status of the experiment as well as the latest results will be presented.

**Primary author:** KETTLE, Peter-Raymond (Paul Scherrer Institute PSI)

**Presenter:** KETTLE, Peter-Raymond (Paul Scherrer Institute PSI)

**Session Classification:** Session Tu - 1

**Track Classification:** Searches for symmetry violations