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Search for the lepton-flavour violating decay Mu -> e + gamma – Latest results from the MEG Experiment

PETER-RAYMOND KETTLE, Paul Scherrer Institute PSI

The first search for the lepton-flavour violating (LFV) decay Mu->e + gamma, using cosmic rays, dates back some sixty years now. This, together with the diversity of such experiments that have followed, shows that the search for "New Physics" is not restricted to the high-energy frontier of TeV-scale accelerators but that the high-intensity, precision frontier can complement it. The MEG experiment at PSI is a LFV search experiment aiming at a sensitivity of O(10^{-13}) for the decay Mu->e + gamma. By using one of the world's most intense surface muon beams, together with a liquid xenon detector of 900 litres and a gradient-field superconducting positron spectrometer, the two-body decay can be distinguished from the normal Michel and radiative muon decay processes. 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.