

The Mu3e Experiment - Introduction and Current Status

Monday 25 August 2014 15:00 (30 minutes)

The Mu3e experiment searches for the lepton flavor violating decay $\mu \rightarrow eee$ aiming for a sensitivity of better than 1 in 10^{16} decays, a four order of magnitude improvement over the previous search by the SINDRUM experiment. This sensitivity is achieved by a novel experimental design based on thin monolithic active silicon pixel detectors and scintillating fibres and tiles.

In this talk, the Mu3e Experiment is introduced and the experimental challenges are discussed. The current state of the detector development with a focus on pixel sensor prototypes and their performance is presented.

WG3: Accelerator Physics (Yes/No)

No

WG2: Neutrino Scattering Physics (Yes/No)

No

WG4: Muon Physics (Yes/No)

Yes

WG1: Neutrino Oscillation Physics (Yes/No)

No

Type of presentation

Oral presentation

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