

Status of the Alcap experiment

Tuesday 26 August 2014 15:00 (30 minutes)

The AlCap experiment is a joint project between the COMET and Mu2e collaborations. Both experiments intend to look for the lepton-flavour violating conversion $\mu + A \rightarrow e + A$, using tertiary muons from high-power pulsed proton beams. In these experiments the products of ordinary muon capture in the muon stopping target are a important concern, both in terms of hit rates in tracking detectors and radiation damage to equipment. The goal of the AlCap experiment is to provide precision measurements of the products of nuclear capture on Aluminium, which is the favoured target material for both COMET and Mu2e. The results will be used for optimising the design of both conversion experiments, and as input to their simulations. Data was taken in December 2013 and is currently being analysed.

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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Session Classification: WG4: Muon Physics and High Intensity applications