

# IPAC 2011 Search



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## ID: 3391 MICE Beam

**Presenter** Yordan Karadzhov (DPNC, Genève)

**Authors** Yordan Karadzhov (DPNC, Genève)

**Abstract** The muon ionization cooling experiment (MICE) is under development at the Rutherford Appleton Laboratory (UK). The goal of the experiment is to build a section of a muon cooling channel that can demonstrate the principle of ionization cooling over a range of emittances and momenta. The MICE beam line must generate several matched muon beams with different momenta and optical parameters at the entrance of the cooling channel. This is done exploiting a titanium target dipping into the ISIS proton beam, a 5T superconducting pion decay solenoid, two dipole magnets and a mechanism for inflation of the initial emittance called diffuser. First measurements of muon rates and beam emittance performed using two TOF hodoscopes detectors will be presented.

### Funding Agency

**Type of Presentation** Poster

**Main Classification** 03 Linear Colliders, Lepton Accelerators and New Acceleration Techniques

**Sub Classification** A09 Muon Accelerators and Neutrino Factories

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*SPMS Author: Matthew Arena — Fermi National Accelerator Laboratory*

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