

## First Ever Ionization Cooling Demonstration in MICE

The Muon Ionization Cooling Experiment (MICE) at RAL has studied the ionization cooling of muons. Several million individual particle tracks have been recorded passing through a series of focusing magnets in a number of different configurations and a liquid hydrogen or lithium hydride absorber.

Measurement of the tracks upstream and downstream of the absorber has shown the expected effects of the 4D emittance reduction. This invited talk presents and discusses these results, and projects the future of ionization cooling.

### Authorship annotation

The author is the Chair of the speakers bureau of the MICE collaboration. In charge of finding a member of the collaboration to present the contribution, if accepted.

### Session and Location

Wednesday Session, Poster Wall #59 (Auditorium Gallery Right)

### Poster included in proceedings:

yes

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**Track Classification:** Poster (not participating in poster prize competition)