



Contribution ID: 29

Type: **Poster**

## The physics programme of next MICE Step IV

The International Muon Ionisation Cooling Experiment is progressing towards full demonstration of the feasibility of this cooling technology decisive for neutrino physics and muon colliders. Its next step IV should provide the first precise measurements of emittances and first evidence of cooling. Spectrometer solenoids, muon trackers and absorber-FC (focus coil) modules are being assembled to make this possible in 2015. The physics programme of ionization cooling Step IV measurements will be described in detail, with Li-H and a few other promising absorber materials of different shapes. It relies on progress of the hardware being detailed in a separate poster. The longer term final step V and step VI complete demonstration measurements being simultaneously prepared (re accelerating RFCC modules, RF cavities inside their own focusing CC ("coupling" coils) will also be outlined.

**Primary author:** RAJARAM, Durga (Illinois Institute of Technology)

**Presenter:** RAJARAM, Durga (Illinois Institute of Technology)

**Track Classification:** Neutrino Beam Flux