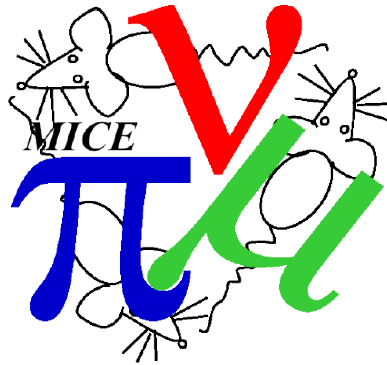




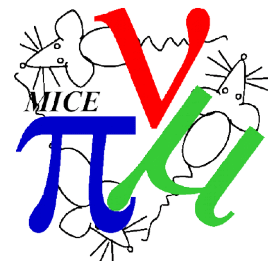
# Intro

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C. Rogers, ISIS Intense Beams Group  
Rutherford Appleton Laboratory

# Reminder – Publication plan

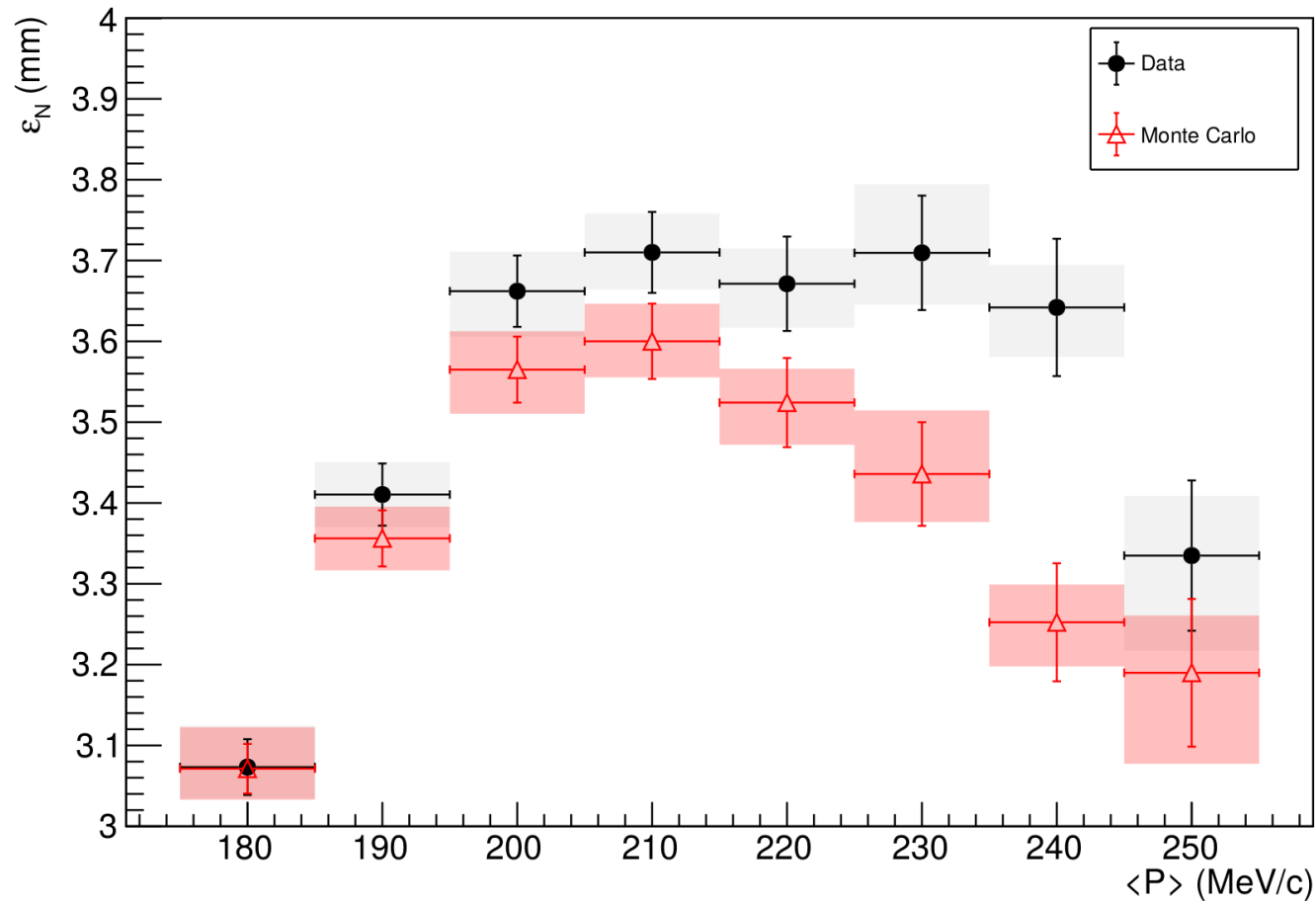
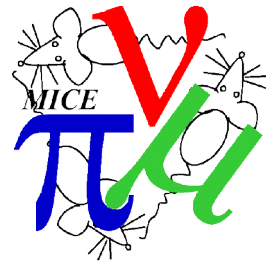


05-Apr-18

v3

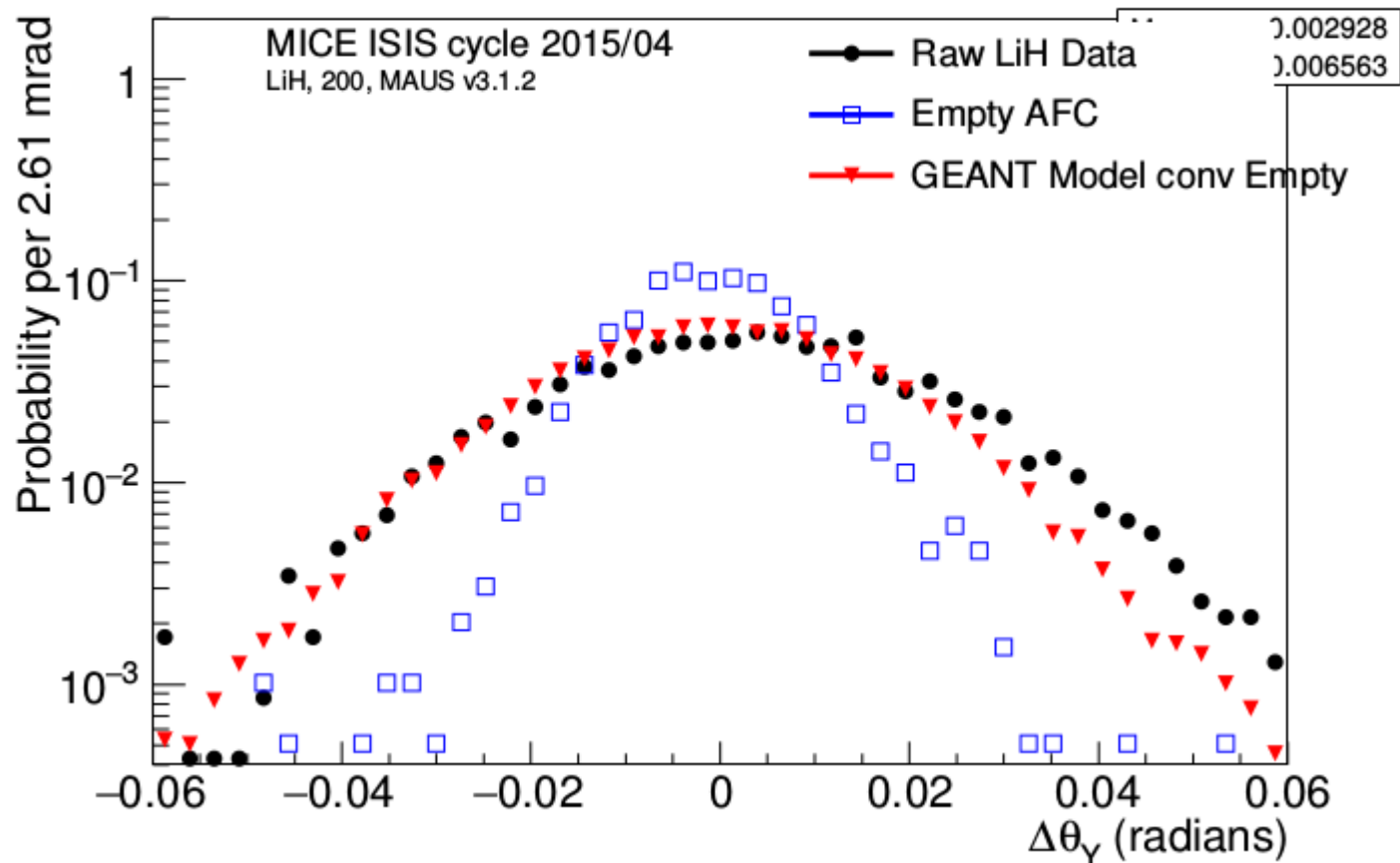
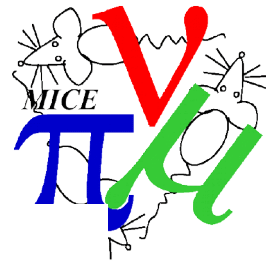
Title	Contact	Target date	
		Final	Preliminary
Direct measurement of emittance using the MICE scintillating-fibre tracker Measurement of multiple Coulomb scattering of muons in lithium hydride Phase-space density/emittance evolution; rapid communication	V. Blackmore J. Nugent C. Rogers	Apr18 w/s Apr18 w/s	Apr18 w/s
The MICE Analysis and User Software framework Performance of the MICE diagnostic systems Muon Ionization Cooling Experiment (h/w) The MICE liquid-hydrogen absorber	D. Rajaram S. Wylbur/P. Franchini C. Whyte/P. Franchini C. Whyte/J. Boehm	Jun-18	Apr18 w/s Jun-18 Jun-18 Apr18 w/s
Phase-space density/KDE/6D-emittance evolution Measurement of multiple Coulomb scattering of muons in LH2 Field-on measurement of multiple Coulomb scattering Beam-based alignment Phase-space density/emittance evolution review paper	T. Mohayai J. Nugent A. Young C. Hunt TBD		Jun-18

# Emittance Measurement Paper



Ready to go?

# Scattering Paper

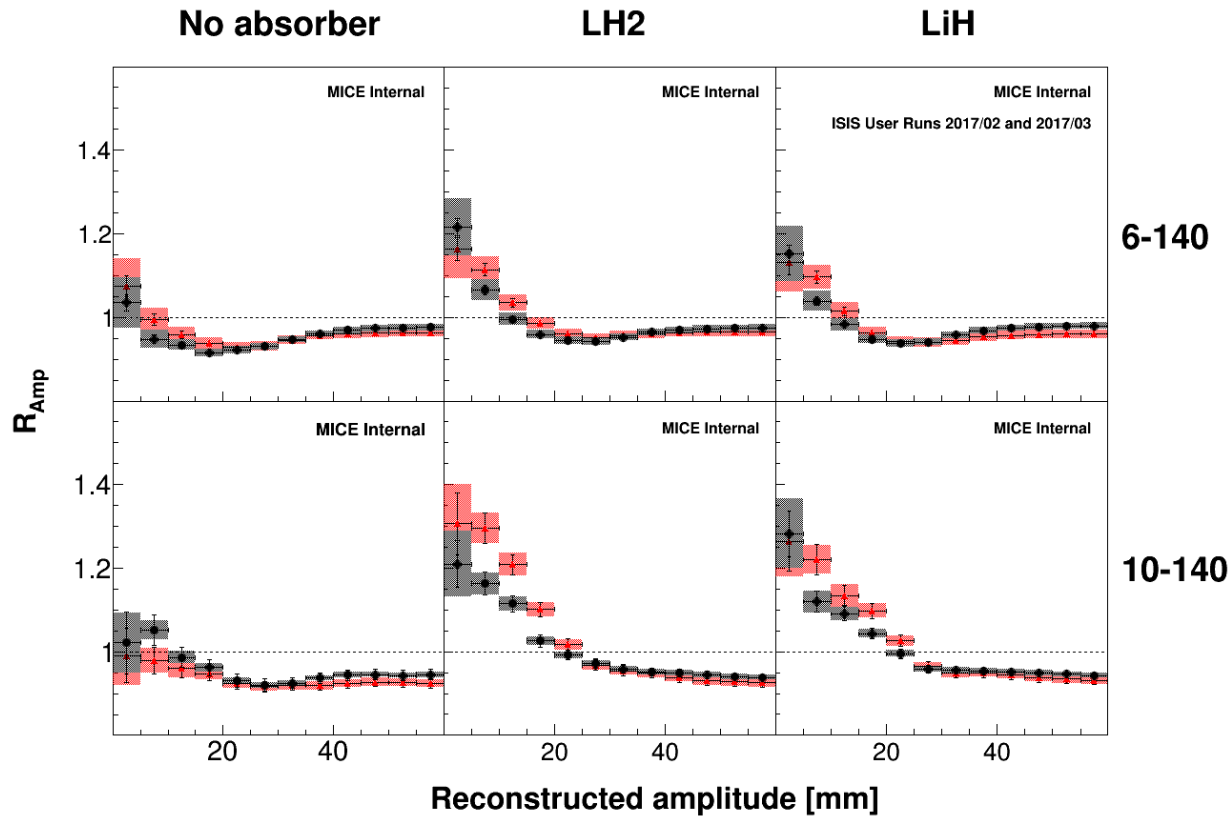
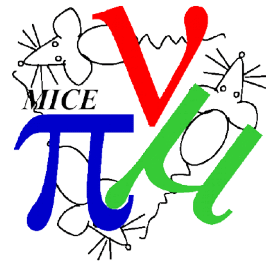


Hung up on left-right asymmetry

Appears to be ongoing issues in reconstruction/alignment procedure

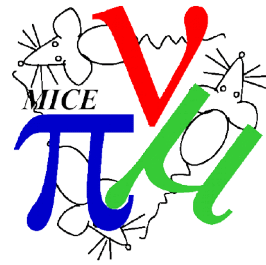
Apply patch alignment during analysis

# Emittance Evolution



Statistical and systematic errors included  
Target end of May for 1<sup>st</sup> draft MICE note

# Other Papers - Measurements



Scattering  
in LH2

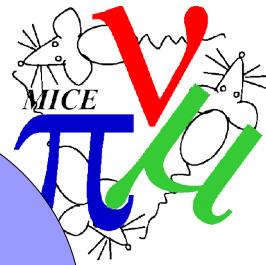
Field-on  
Scattering

6D emittance  
evolution

Long  
emittance  
evolution



# Other Papers - Techniques



Tracker  
Performance

PID  
Performance

System  
Performance  
Paper

Transfer  
Matrix/Map  
Measurement

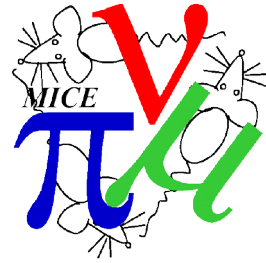
Optical  
Heating

Optical  
Alignment  
and Fields



# Sample Analysis Toolsets

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**Rogers**  
Emittance  
Evolution

**Blackmore**  
Emittance  
Measurement

**Hunt**  
Emittance  
Measurement

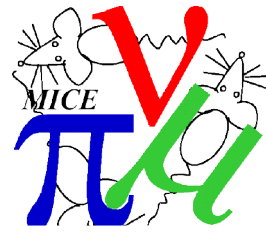
**Bayes/Nugent**  
Scattering





# Comments

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- We have a **great data set**
- We have a **great analysis team**
- There are **great opportunities**

Now is the time to make it happen!