# LArIAT
# Liquid Ar In A Testbeam

argon
18
Ar
39.948

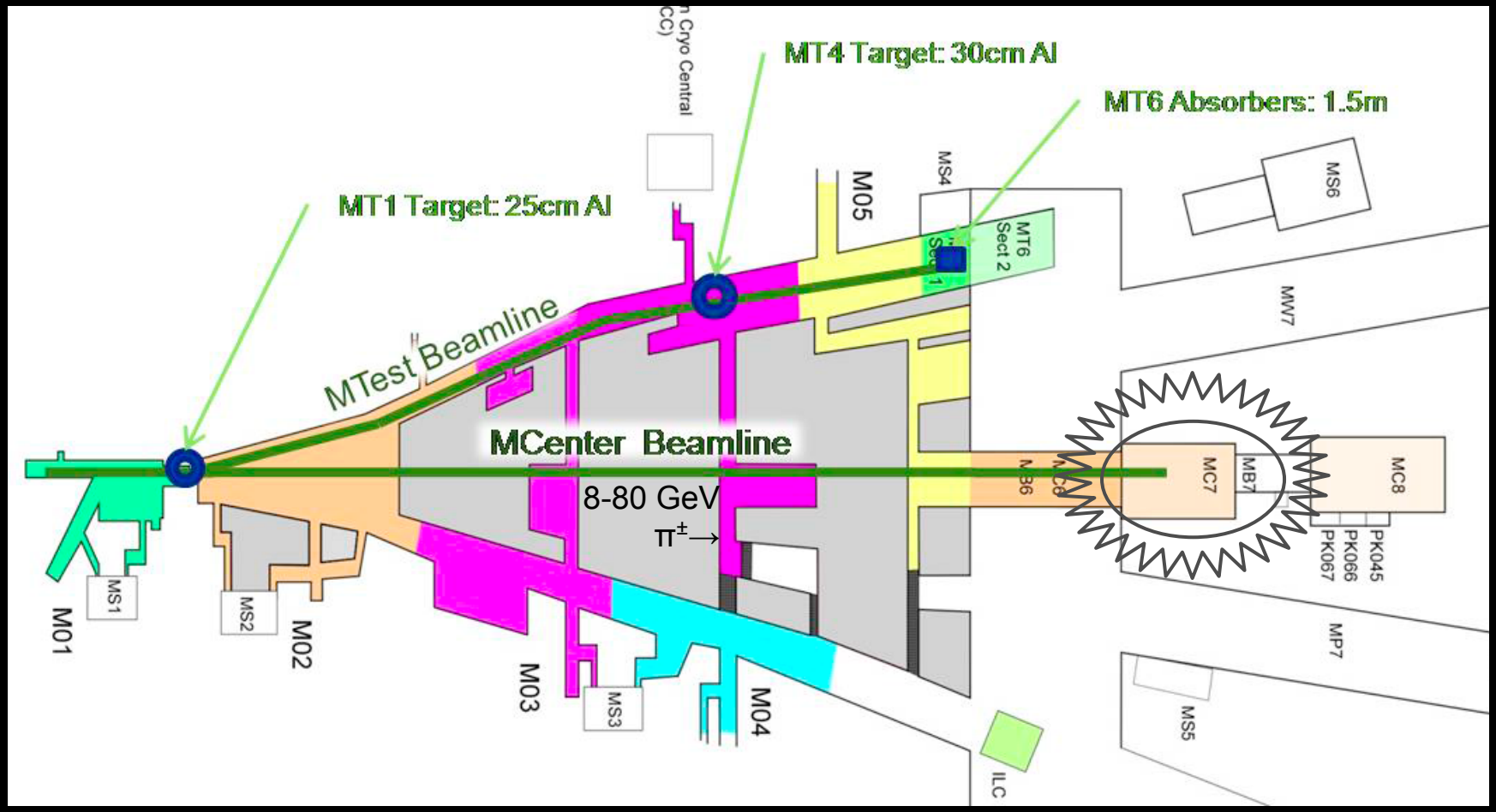
Jason St. John for the T-1034 Collaboration

All Experimenters' Meeting

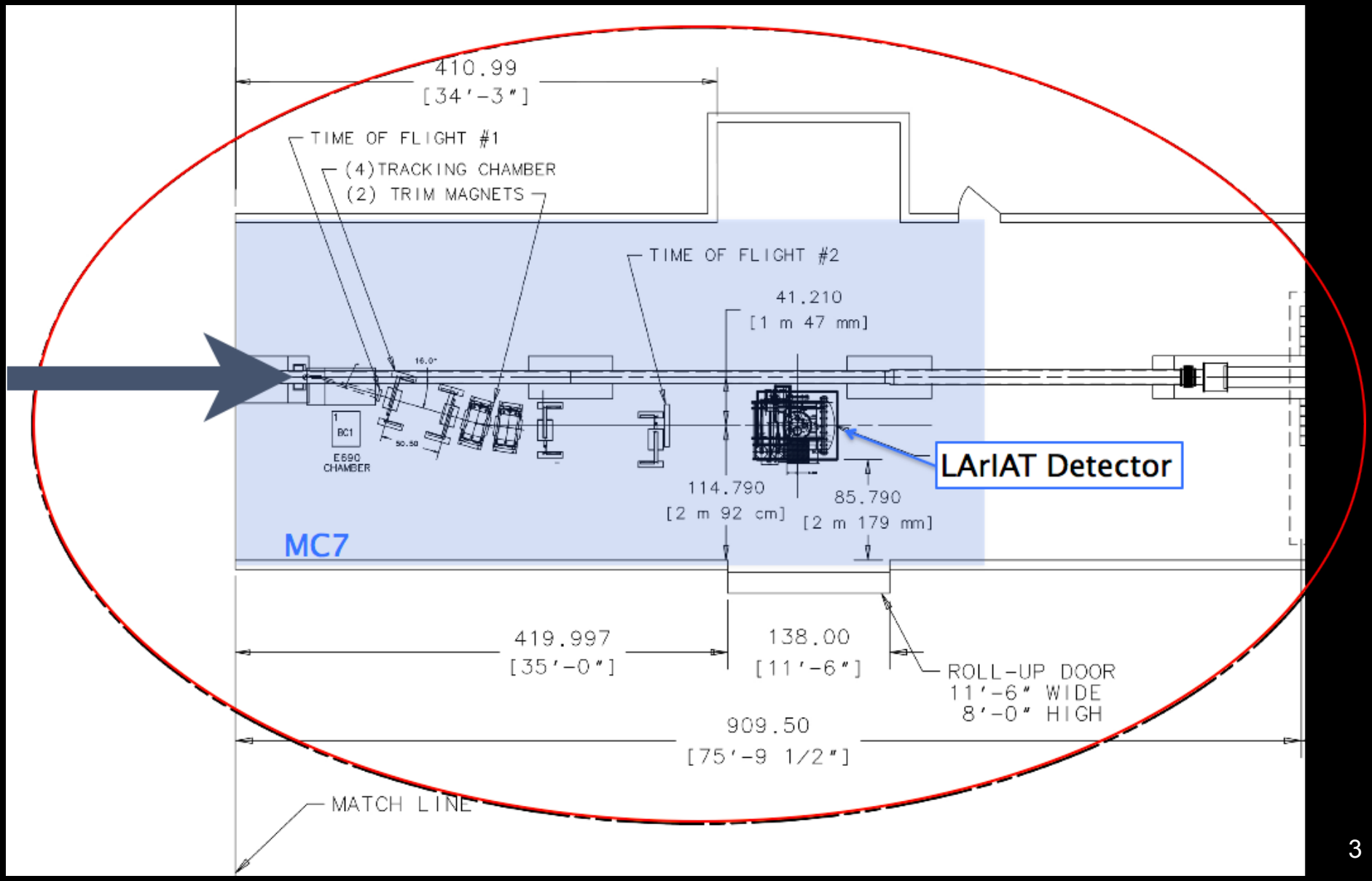
2015.04.06

# Quick intro to LArIAT

Receives MCenter beam: 8-80 GeV $\pi^{\pm}$



# Quick intro to LArIAT



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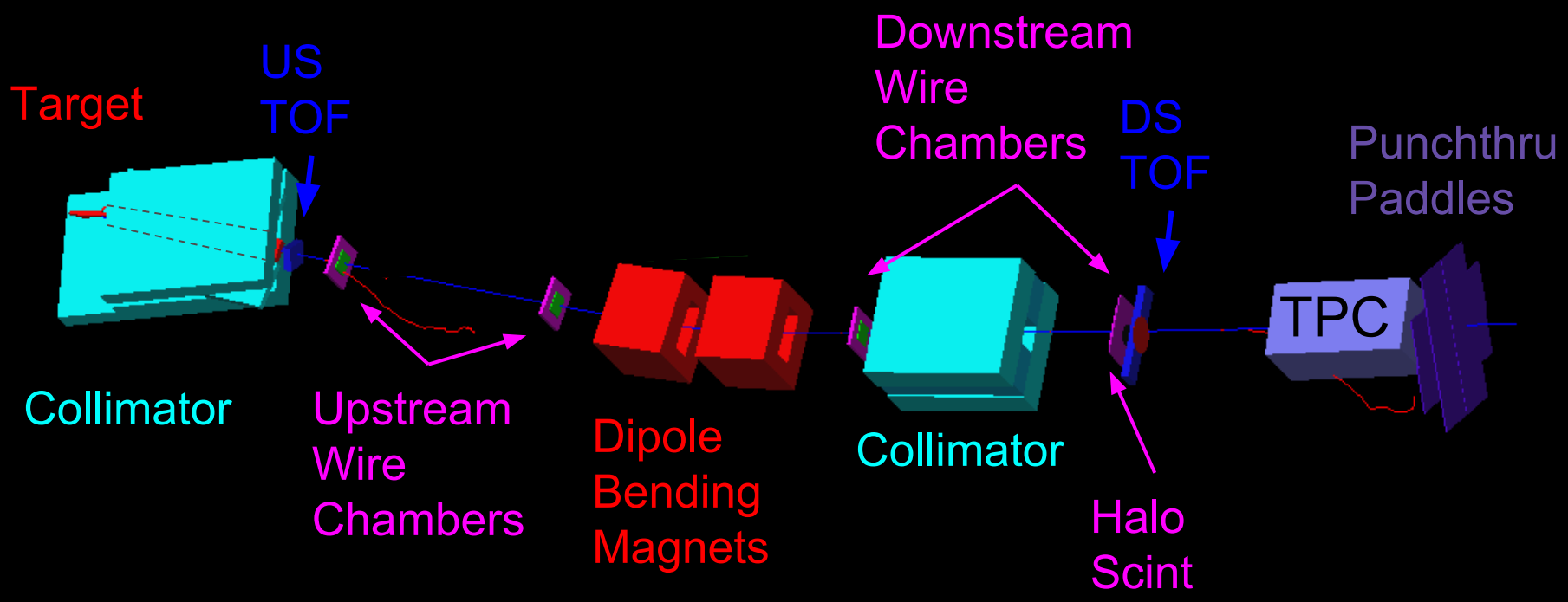
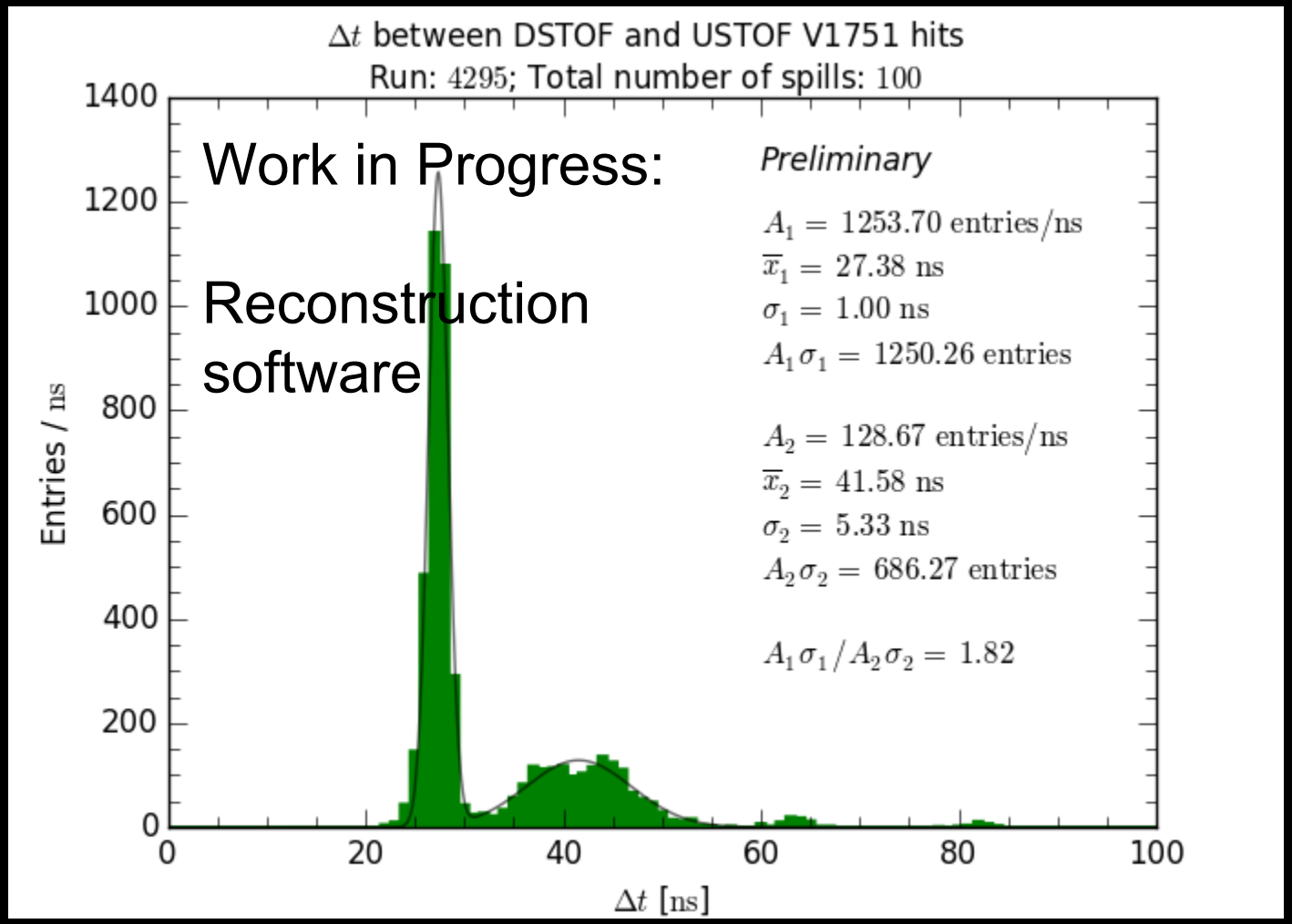


# Beamline Instruments installed and commissioned

# Tertiary beam, DAQ/Trigger commissioning nearly complete

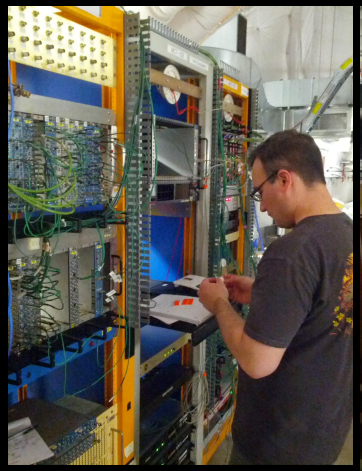


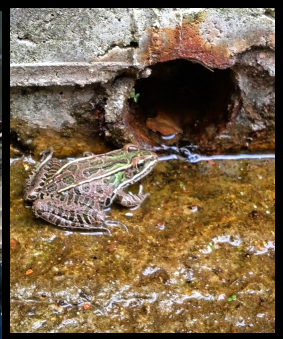
# Cryostat and TPC

TPC sense wire readout installed & commissioned.

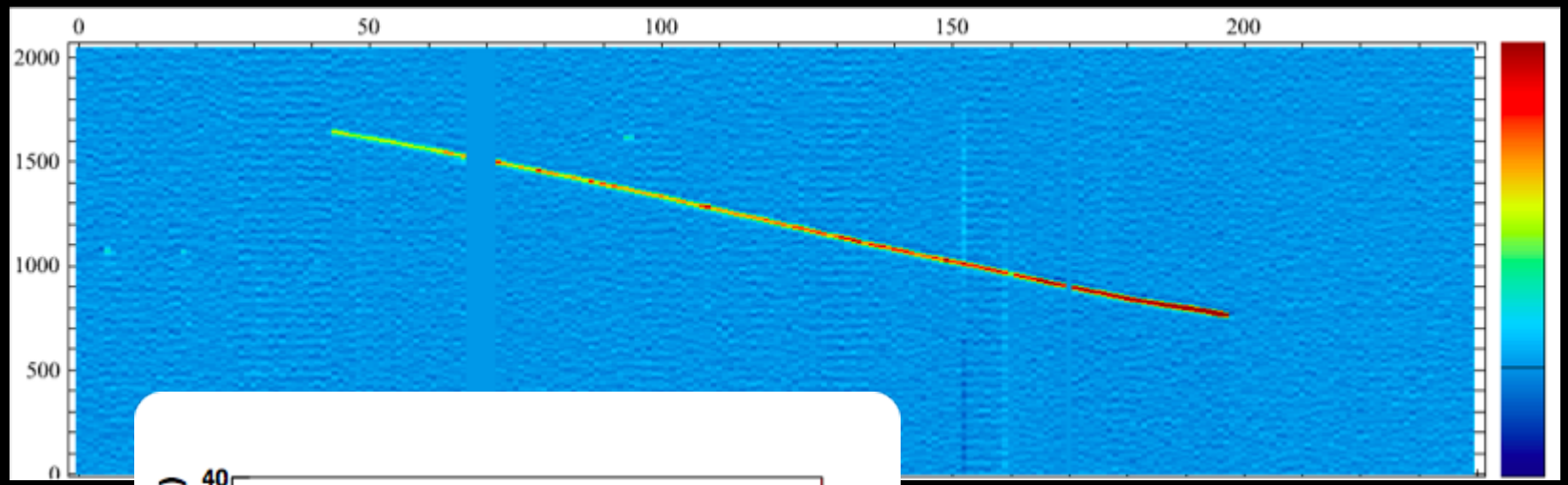
Cryostat plumbing being completed now.

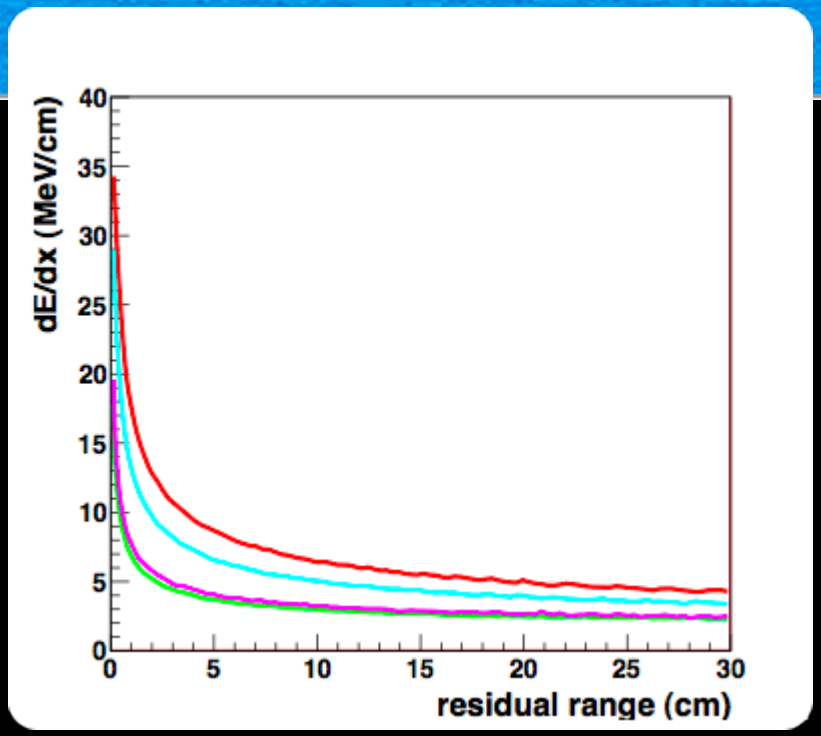
# More from LArIAT soon!





# Scientific Goals for LArIAT

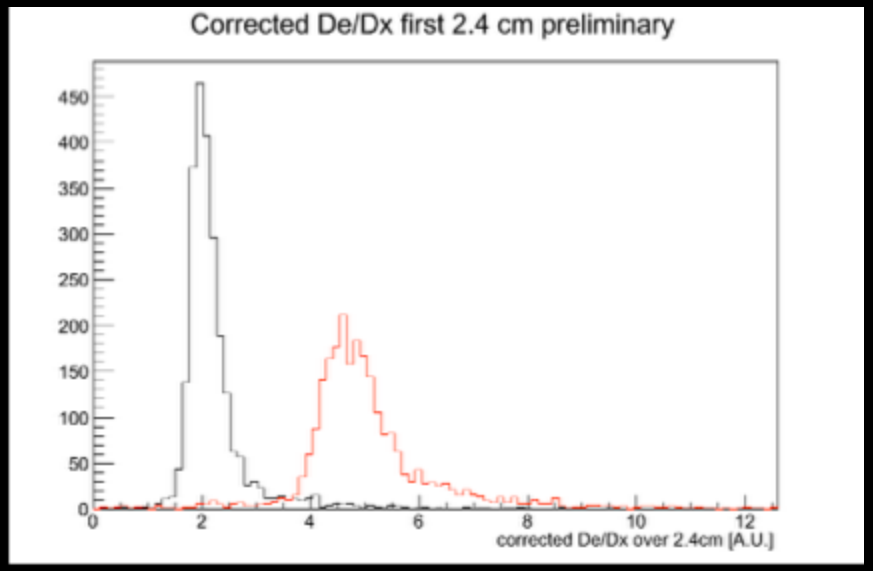
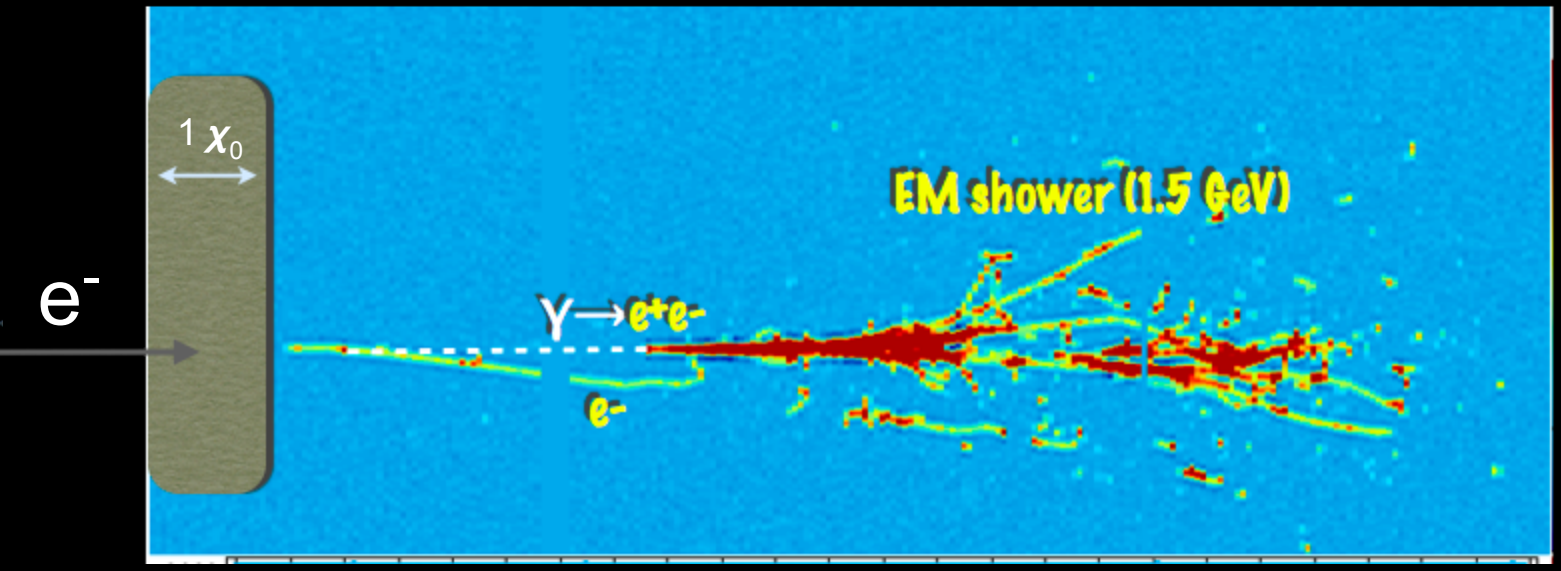



Single tracks + 3D imaging
⇒ dE/dx vs. residual range

Experimental determination of proton ID, p/K separation, K/π/μ separation for LArTPCs

# Scientific Goals for LArIAT

Separation efficiency and sample purity for EM shower initiators in LAr TPCs

$e^-/\gamma$ separation critical to MicroBooNE resolving MiniBooNE low-E excess