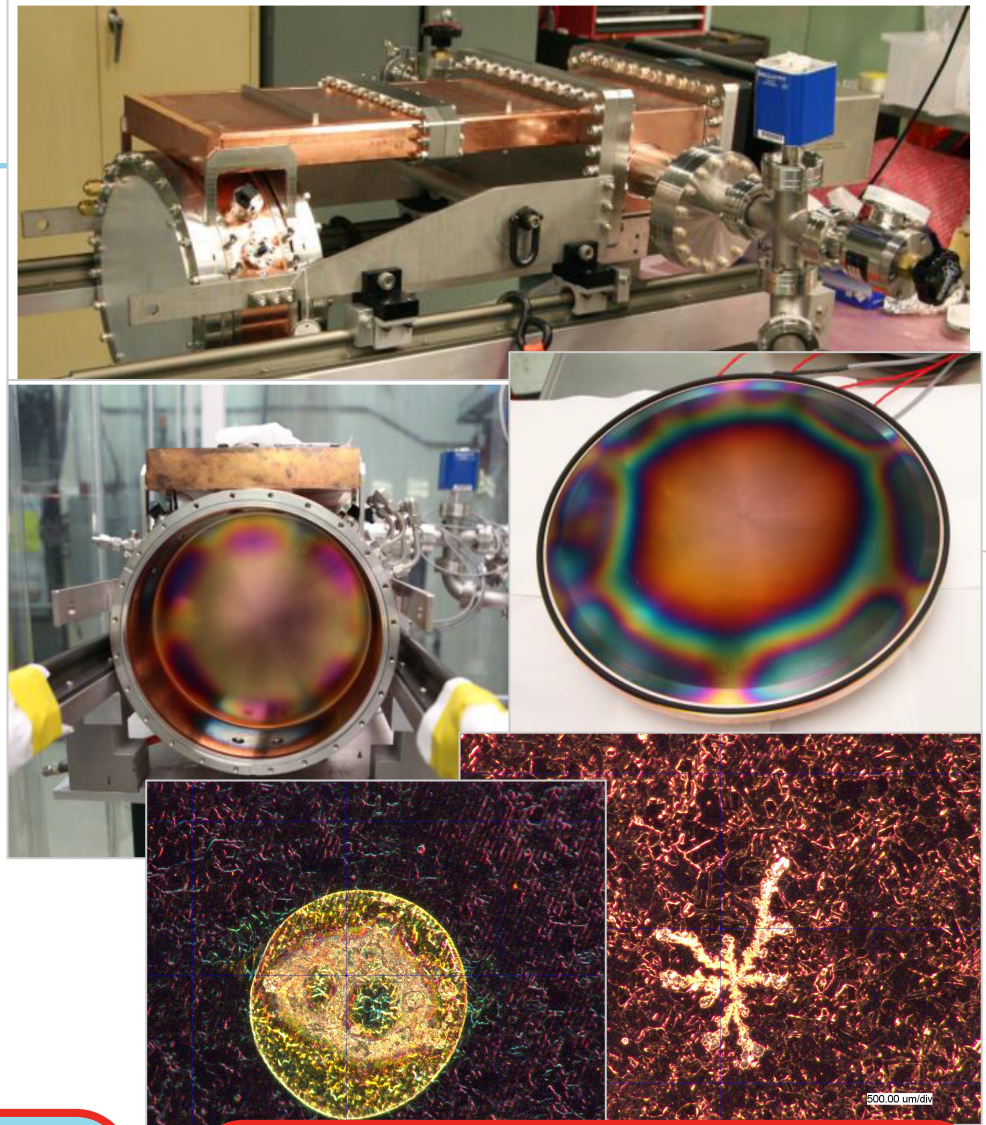
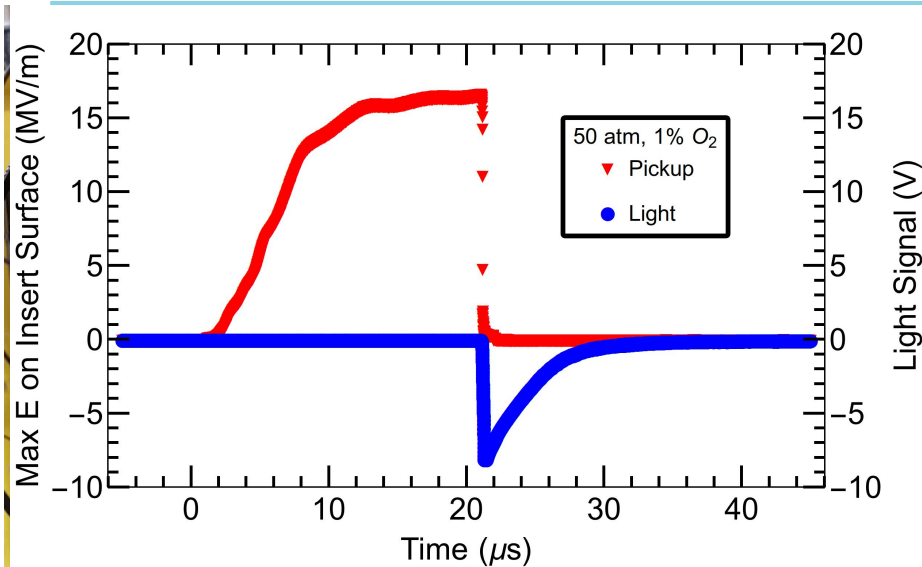


# MuCool Test Area



## High-Pressure RF Cavities

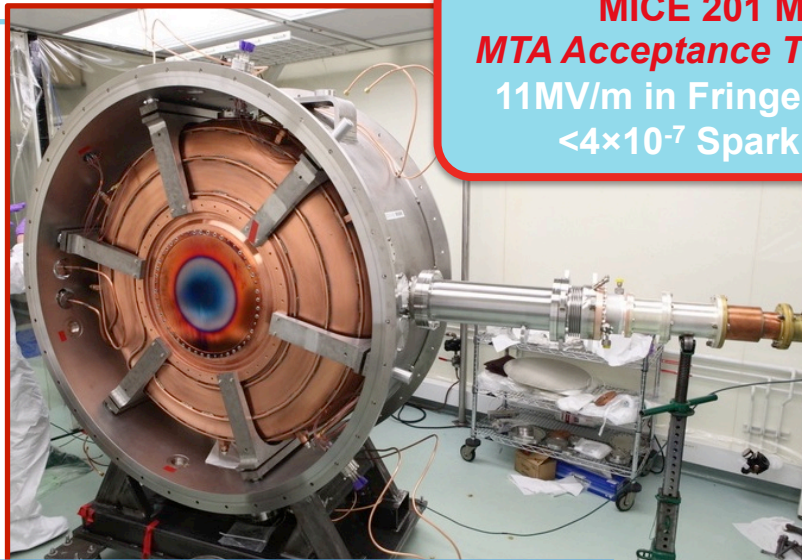
- Characterization of dielectric-loaded cavity materials
- Evaluation of plasma loading in “hybrid” cooling channel
- Complete results from the HPRF beam test was submitted to PRST-AB

## Characterization of “Modular” Vacuum RF Cavity

- Max. safe operating gradient 45 MV/m
- Completed study of breakdowns with B=0 ⇒ minimal surface damage
- Studies in B = 3T now underway



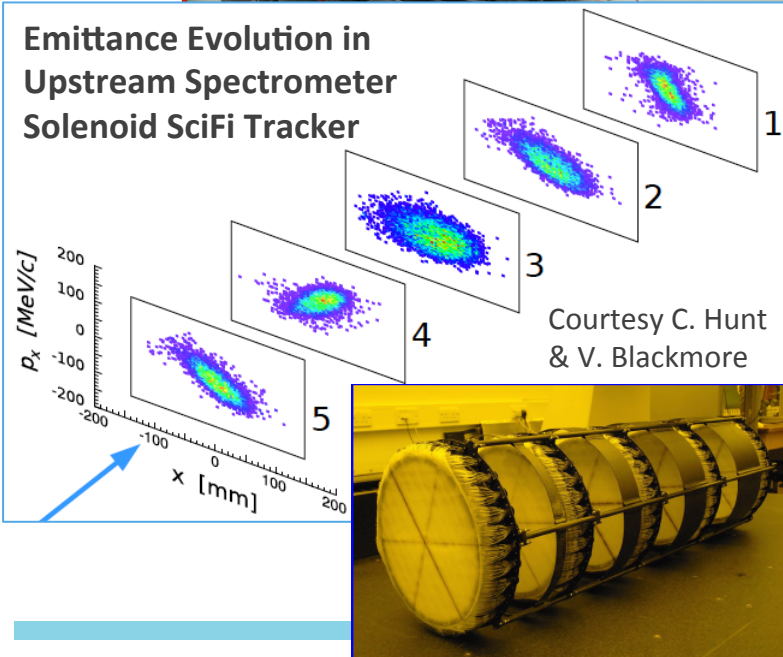
# MICE Experiment



**MICE 201 MHz RF Module –  
MTA Acceptance Test in B-field Complete**  
11MV/m in Fringe of 5T Lab-G Solenoid  
<4×10<sup>-7</sup> Spark Rate (0 observed)

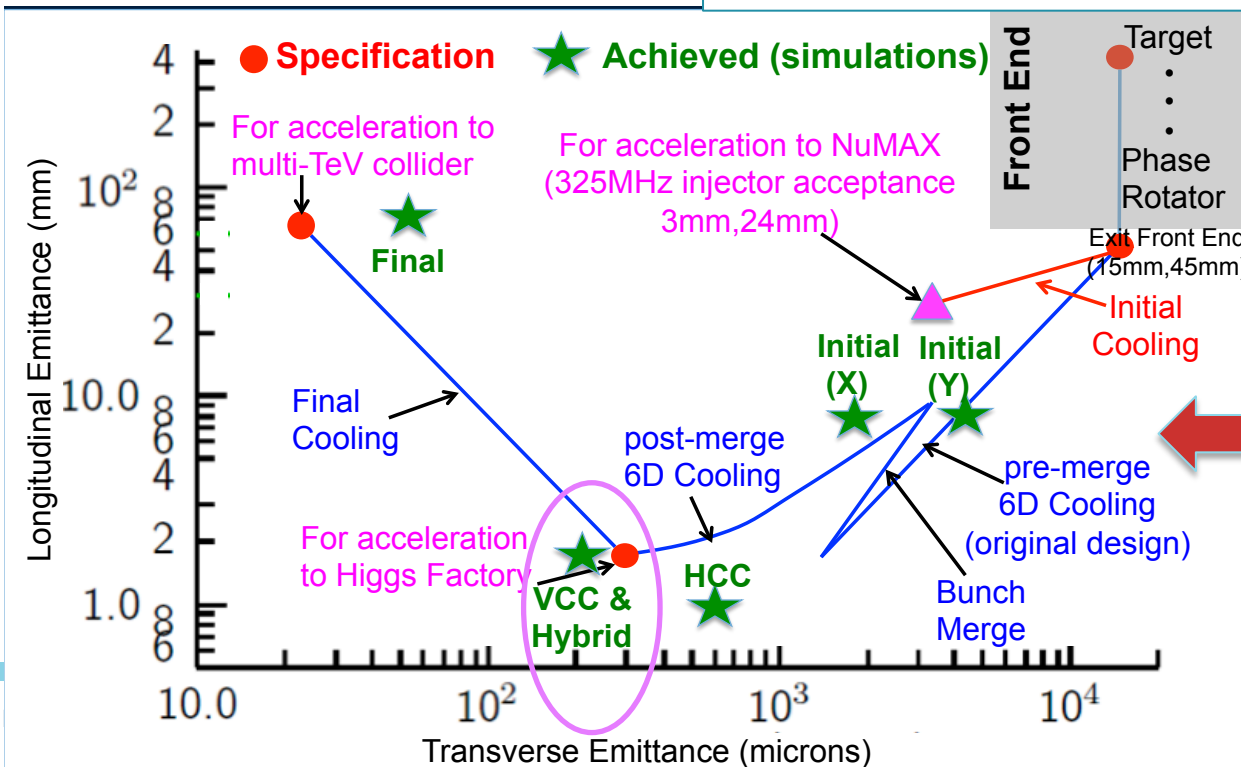
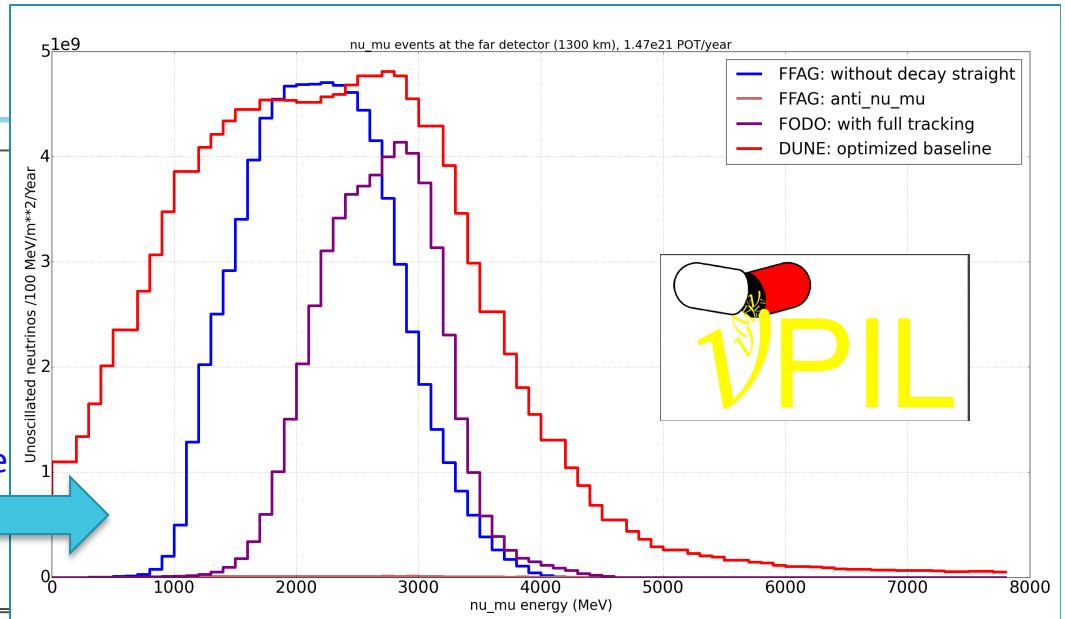
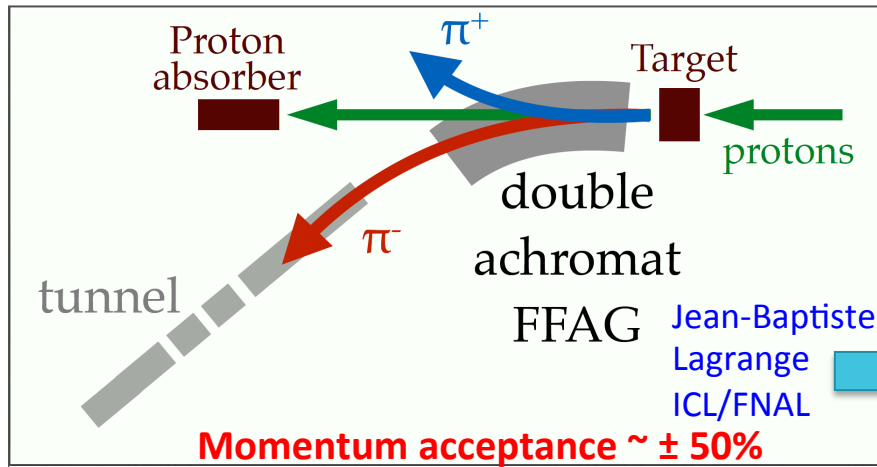
**Support for  
MICE Step IV  
Commissioning**

**Emittance Evolution in  
Upstream Spectrometer  
Solenoid SciFi Tracker**





# Accelerator Design



**6D Muon Ionization Cooling Designs Approaching Final Specifications for NF and Collider Applications**