

An aerial photograph of the Fermilab facility. The central feature is a large, circular, blue-colored structure, likely the main accelerator ring. To its left is a tall, narrow, white building with a dark, vertical opening. The facility is surrounded by green grass, parking lots filled with cars, and various smaller buildings. A river or stream flows along the right side of the image. The background shows a flat landscape with some trees and distant structures under a clear sky.

Welcome to Fermilab!

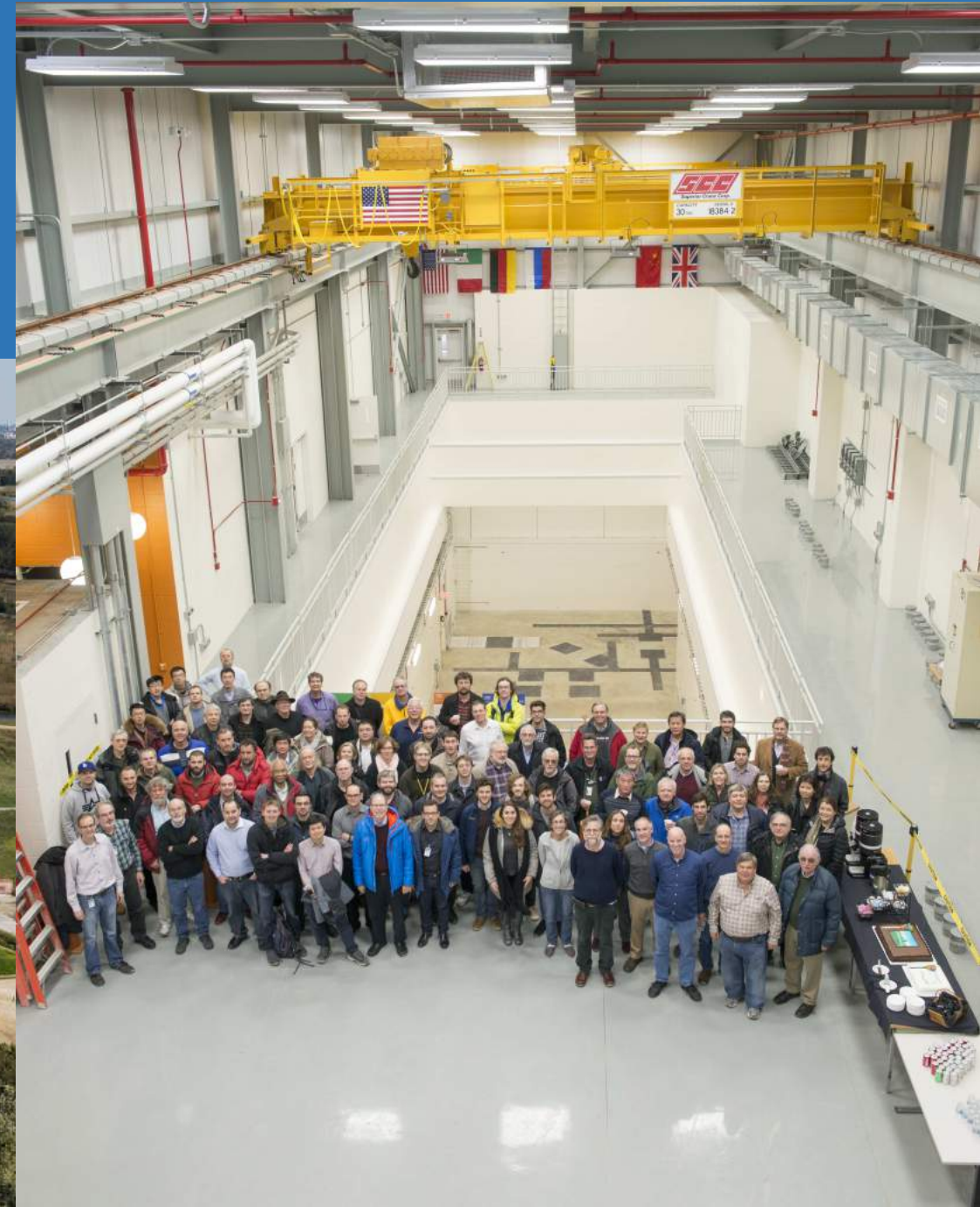
Mu2e Ground breaking On April 18, 2015



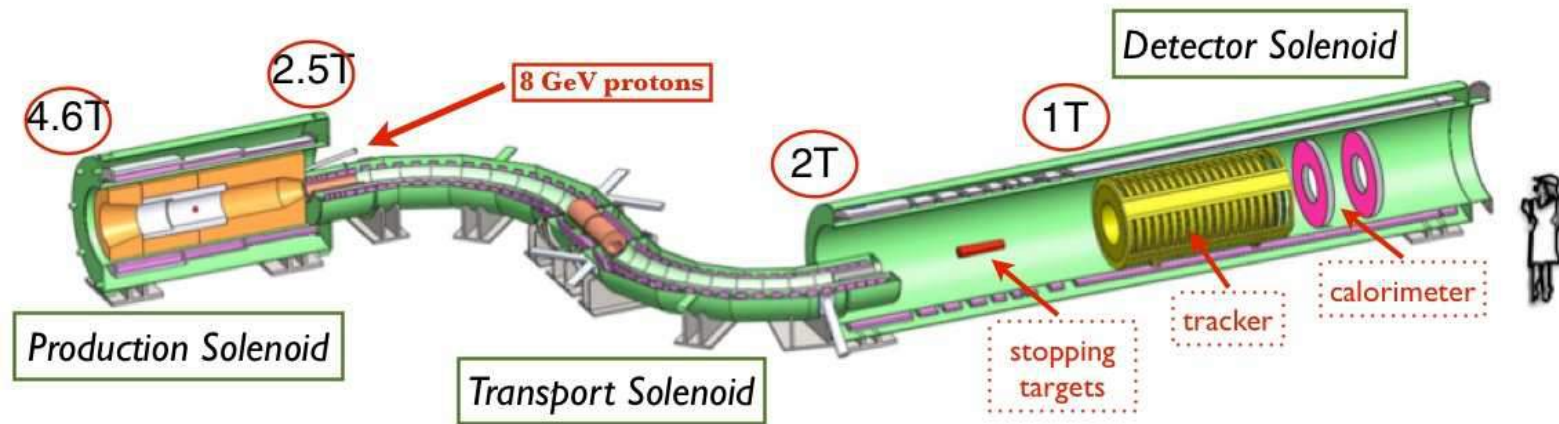
The Mu2e Collaboration

More than 180 scientists from 32 institutions are working on the design and construction of the Mu2e experiment at Fermi National Accelerator Laboratory.

The Muon guys have finally an house!



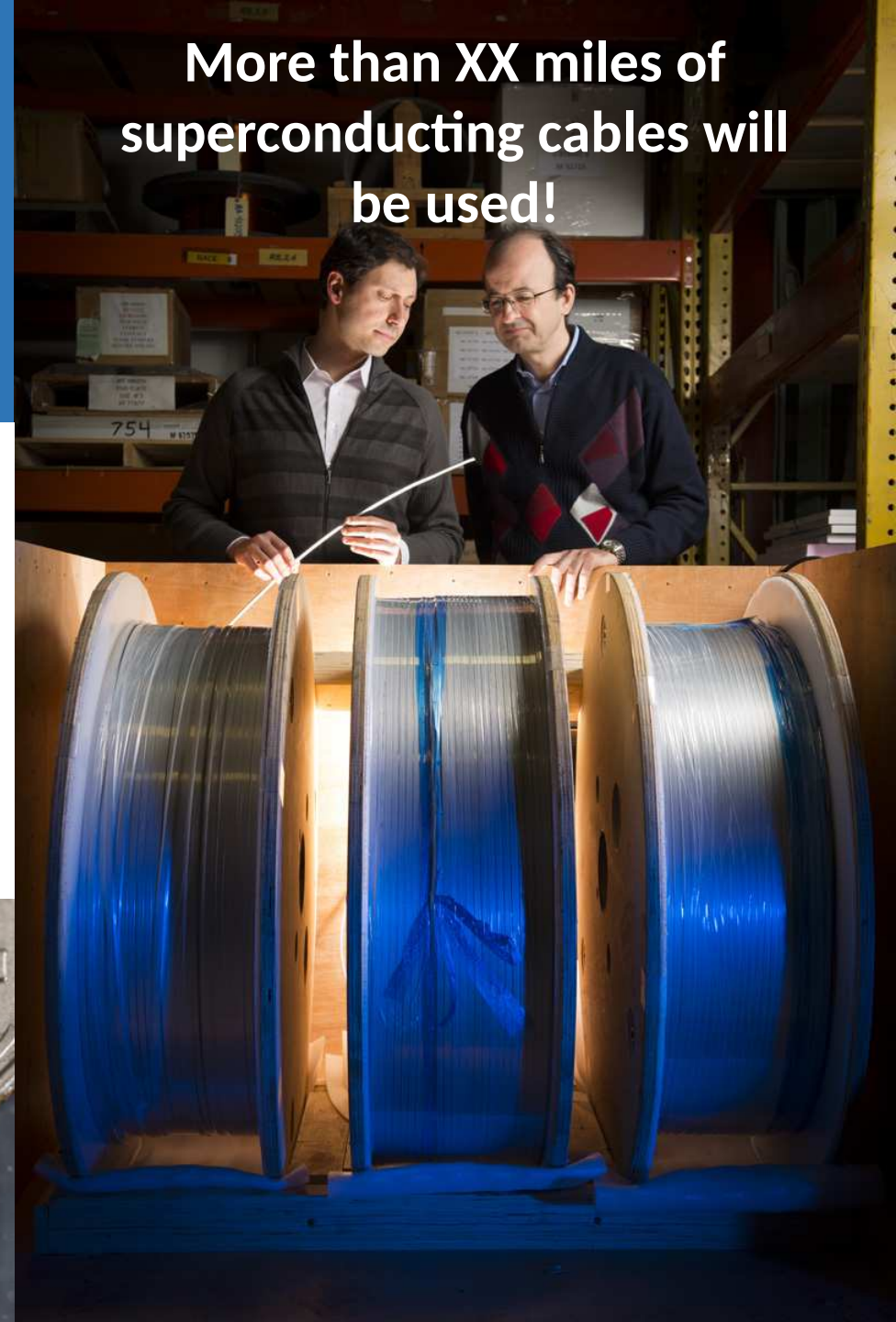
We will use 3 Superconducting solenoids



Solenoids production involves world leading industries in USA & Italy



More than XX miles of
superconducting cables will
be used!



Solenoids R&D

Prototyping & Test @ Fermilab



Cryogenic Facility @ Fermilab

Solenoids R&D

Prototyping & tests @ Fermilab



The Mu2e straw tube tracking system

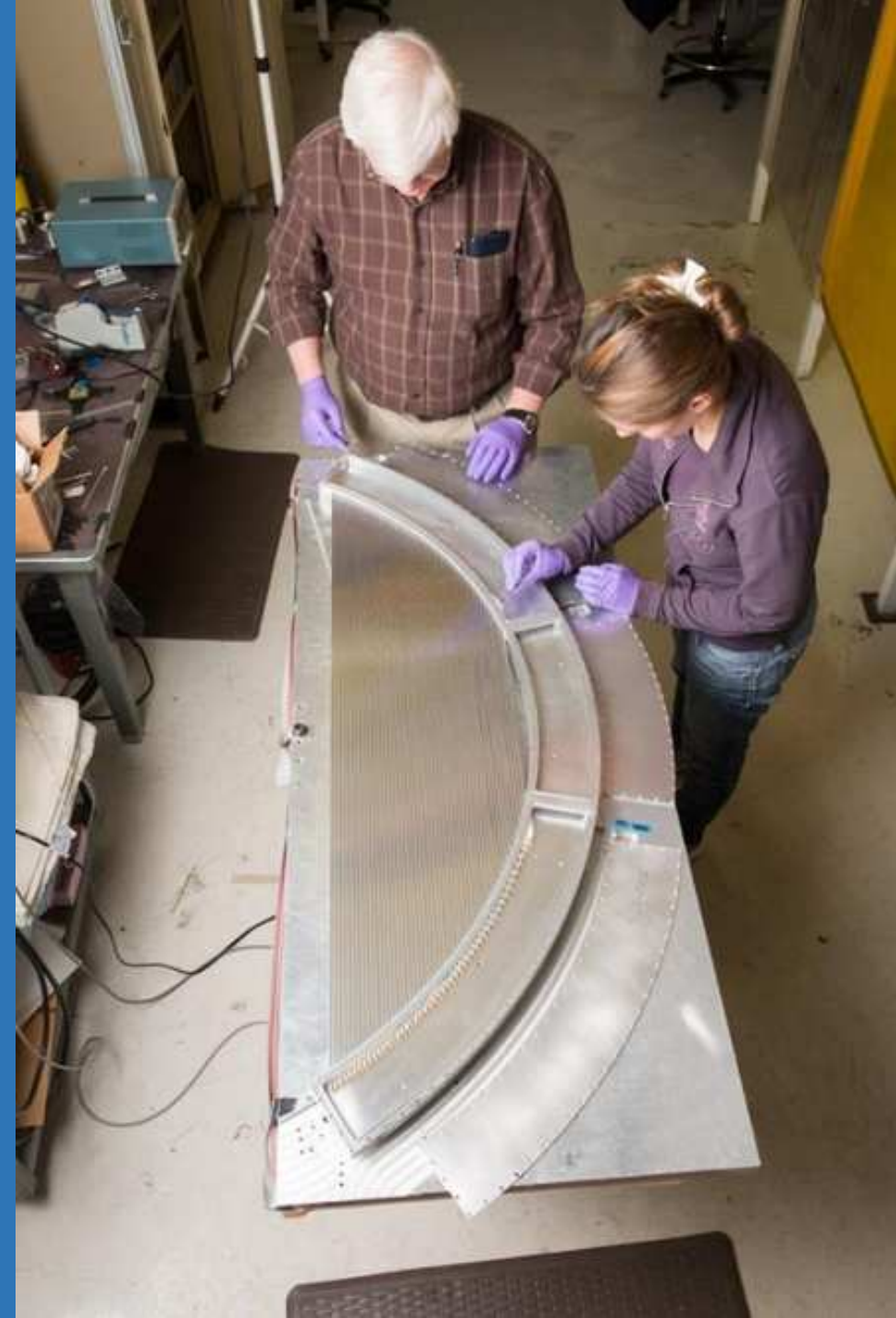
Fermilab leads a wide contribution from XX
Universities in USA:

- 0 Univ of Minnesota
- 0 Univ College of York
- 0 Univ of Houston
- 0 Univ of Rice
- 0 Univ/Lab of Berkeley



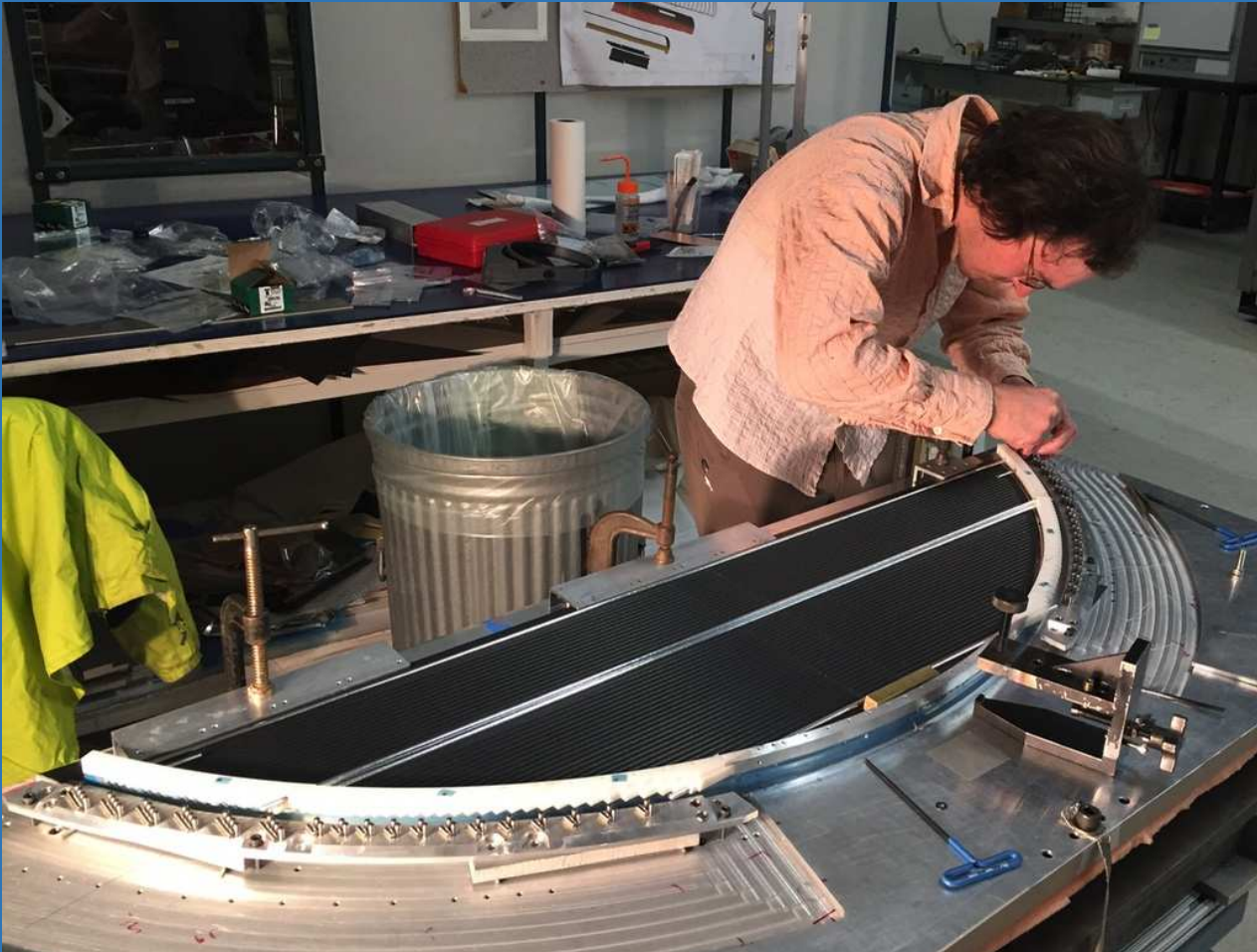
Tracker R&D

Assembly & test @ University of Minnesota



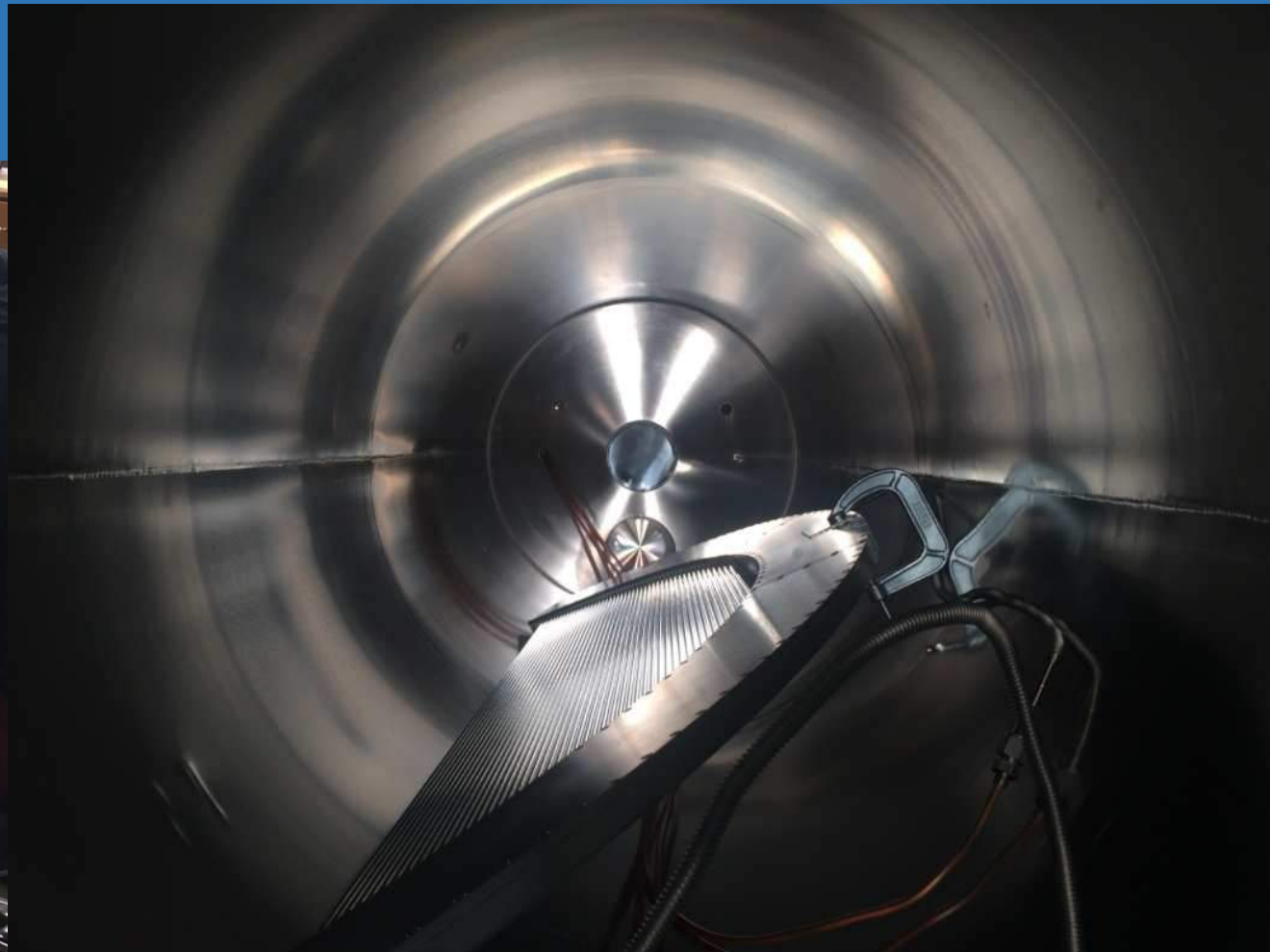
Tracker prototype

Assembly & test @ Fermilab



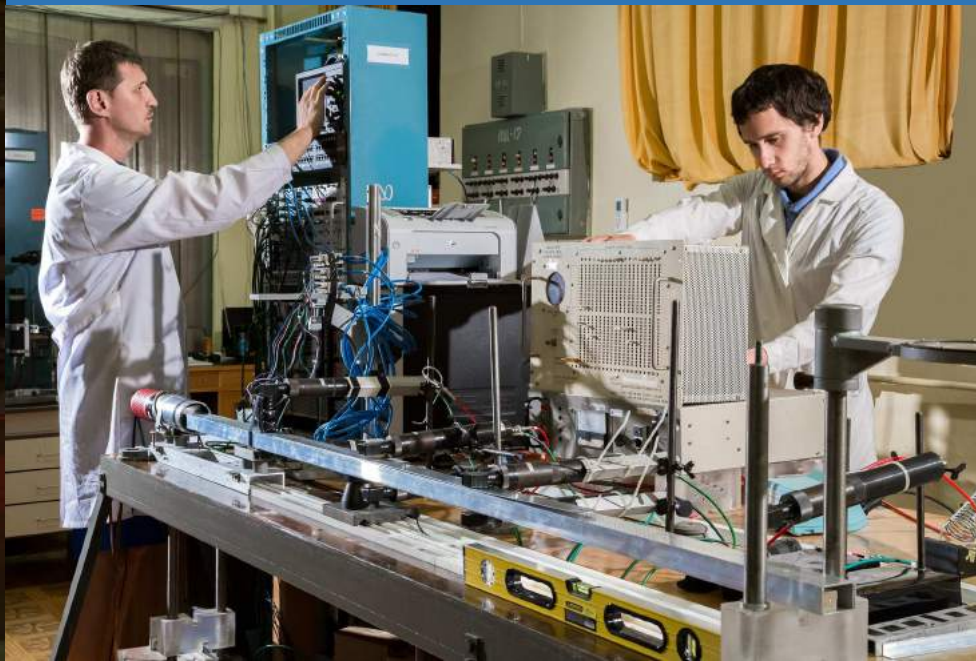
Tracker R&D

Tests @ Fermilab



Mu2e will use XX scintillating counters to detect Cosmic rays

R&D ongoing
@ Dubna Institute (Russia)
@ University of Virginia (VA USA)

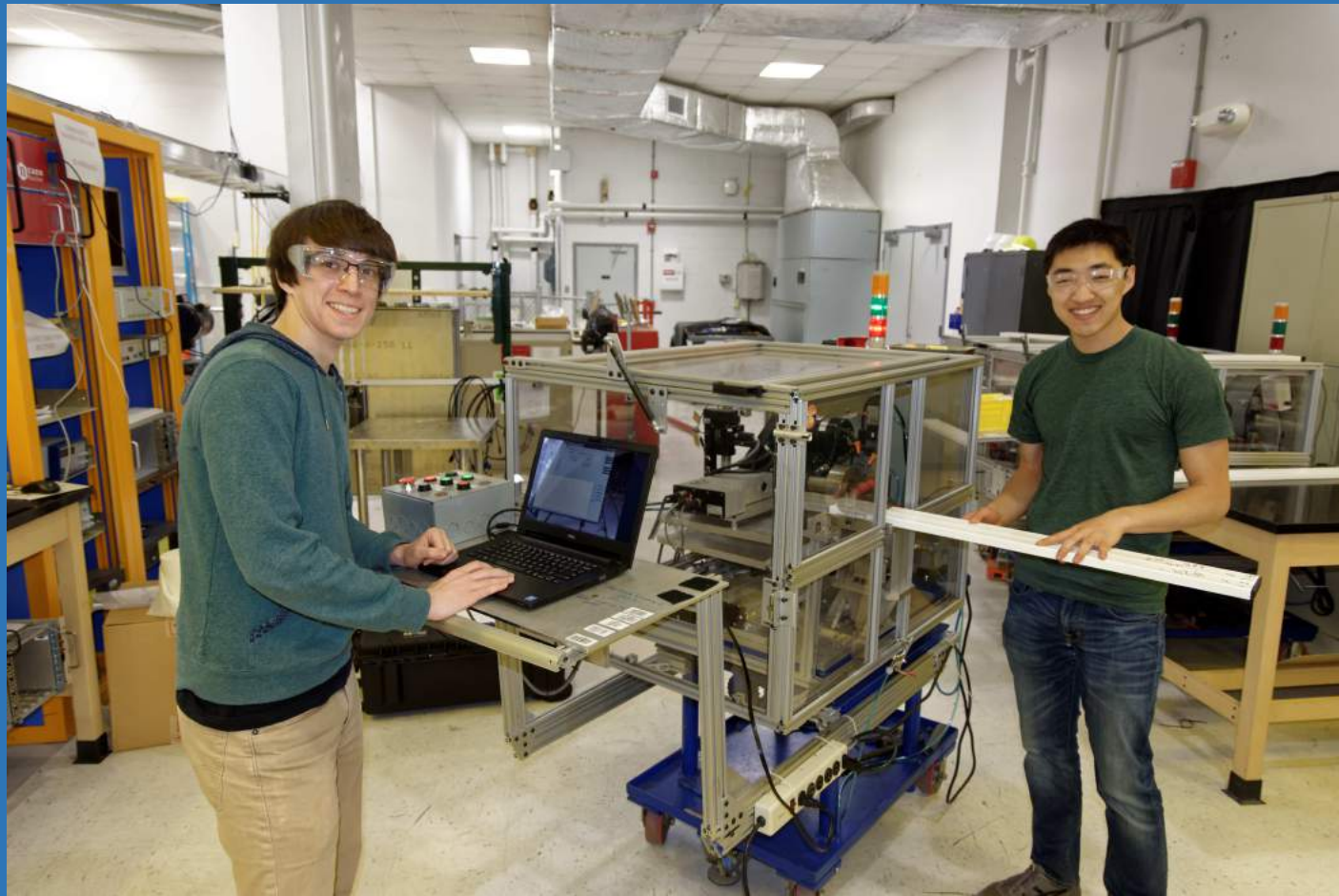


Modules will be assembled
@ Univ of Virginia

total active area will be $\sim 1200 \text{ m}^2$!

Cosmic ray veto R&D

Test and production of scintillating counters engage young students @ University of Virginia (VA, USA)



Cosmic ray veto R&D

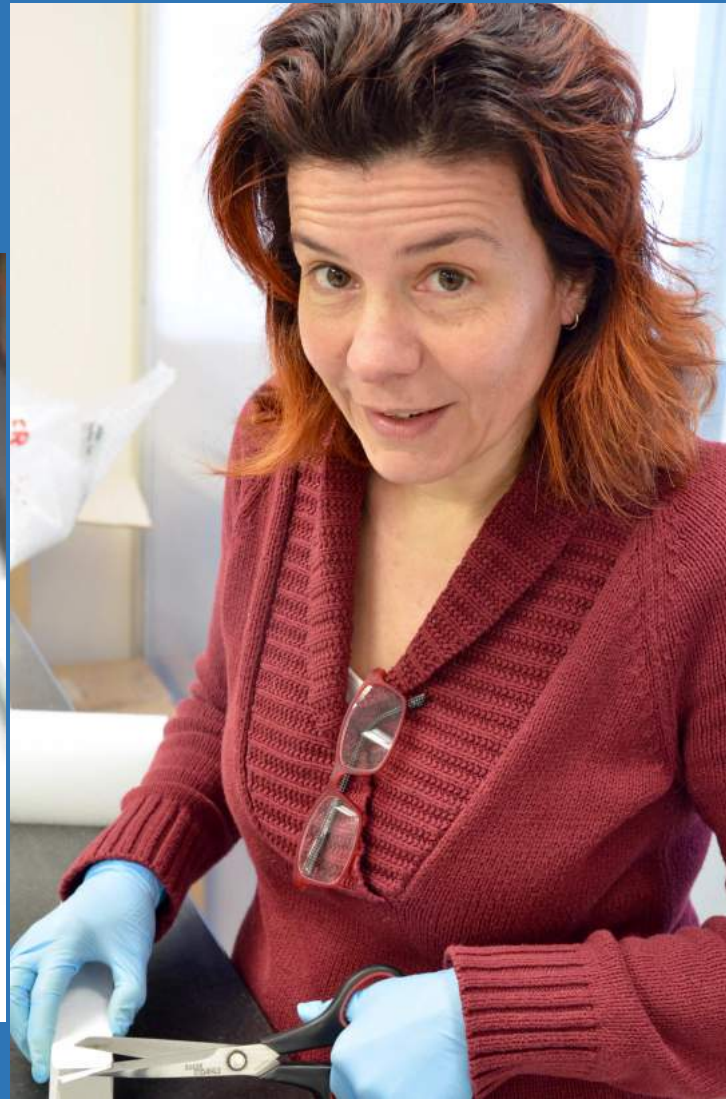
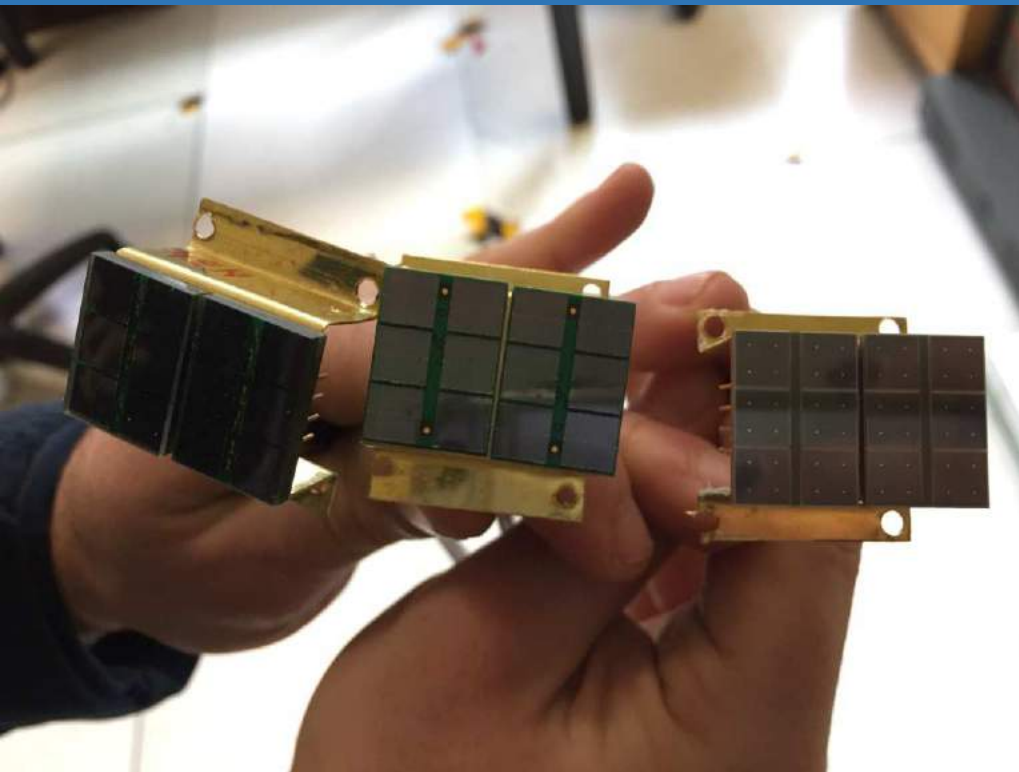
Detector prototype assembly for
beam tests @ Fermilab



The Mu2e Crystal calorimeter

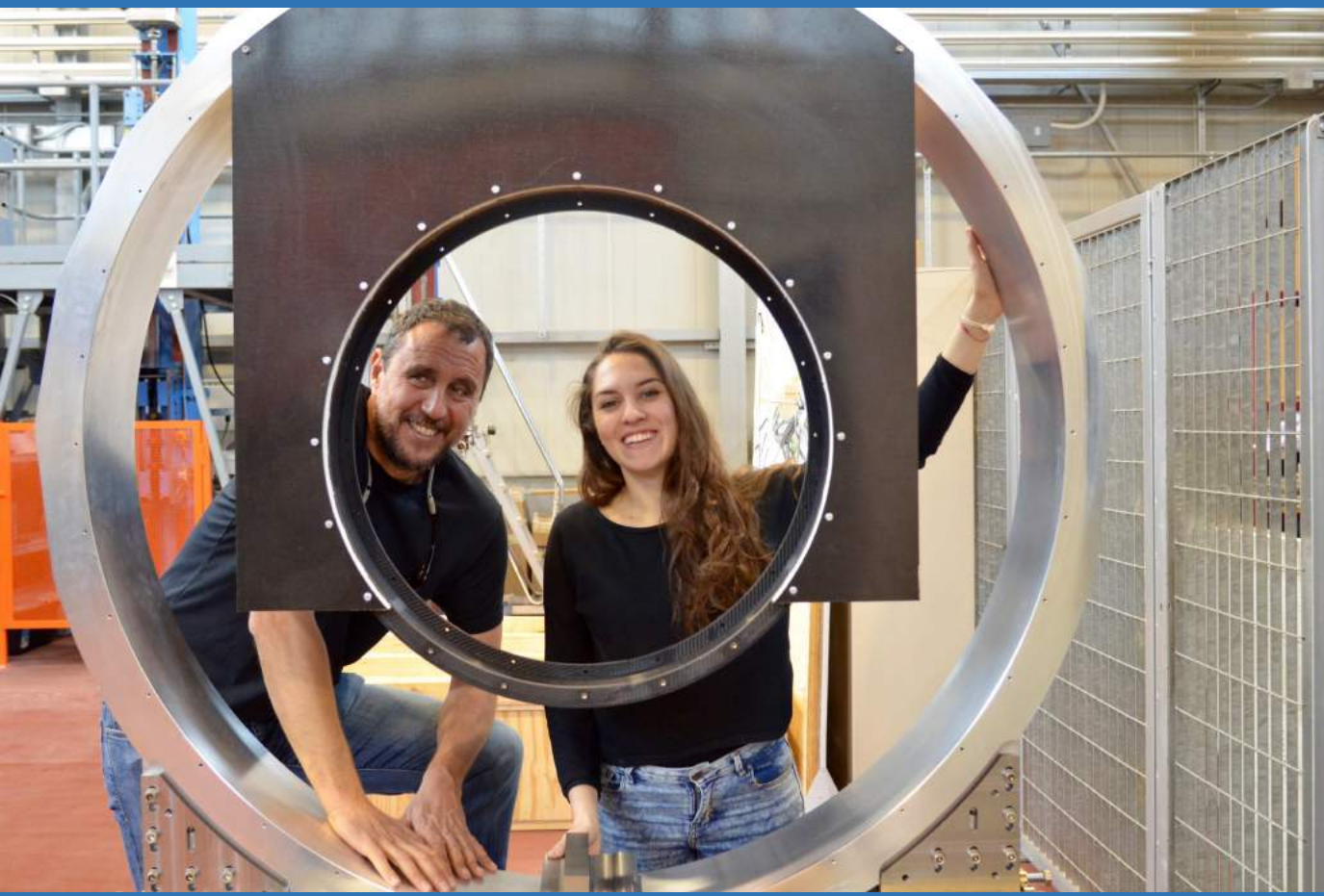
Crystal QA @ INFN – Frascati (Italy)

Photosensor QA @ INFN – Pisa (Italy)

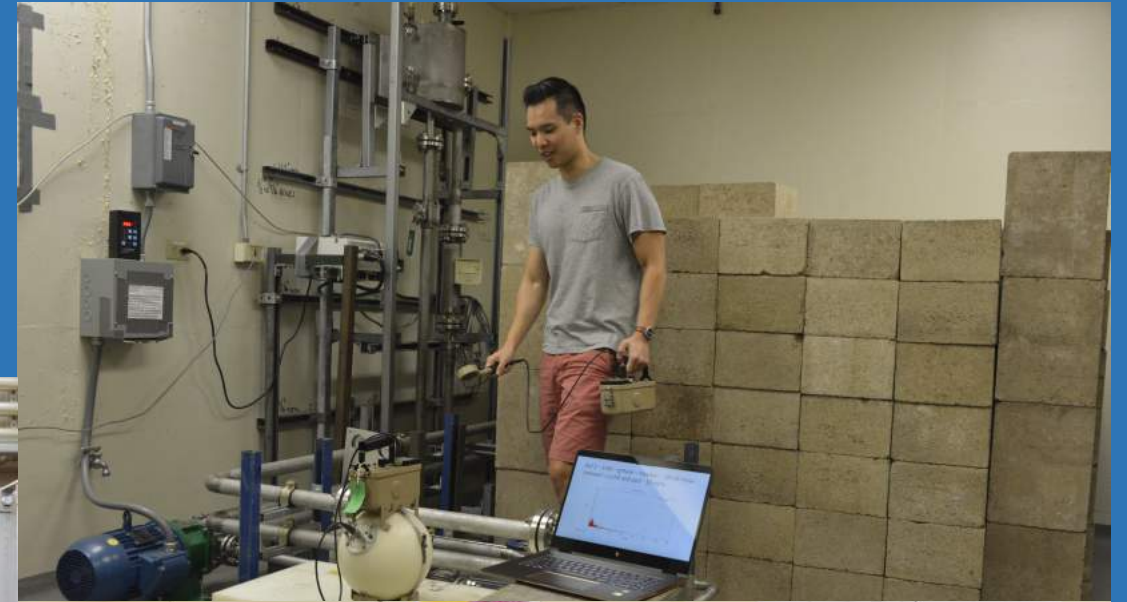


Calorimeter R&D

Mechanical tests @ INFN – Frascati, Rome (Italy)

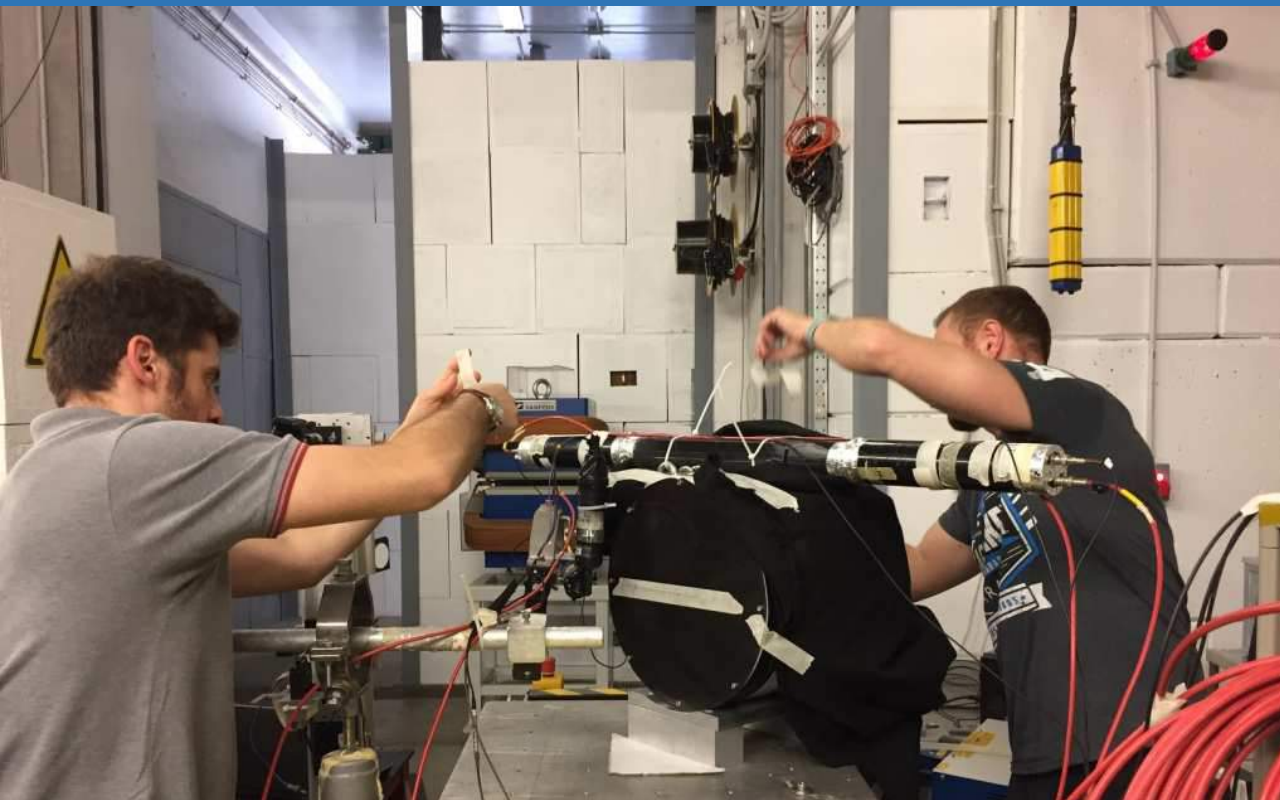
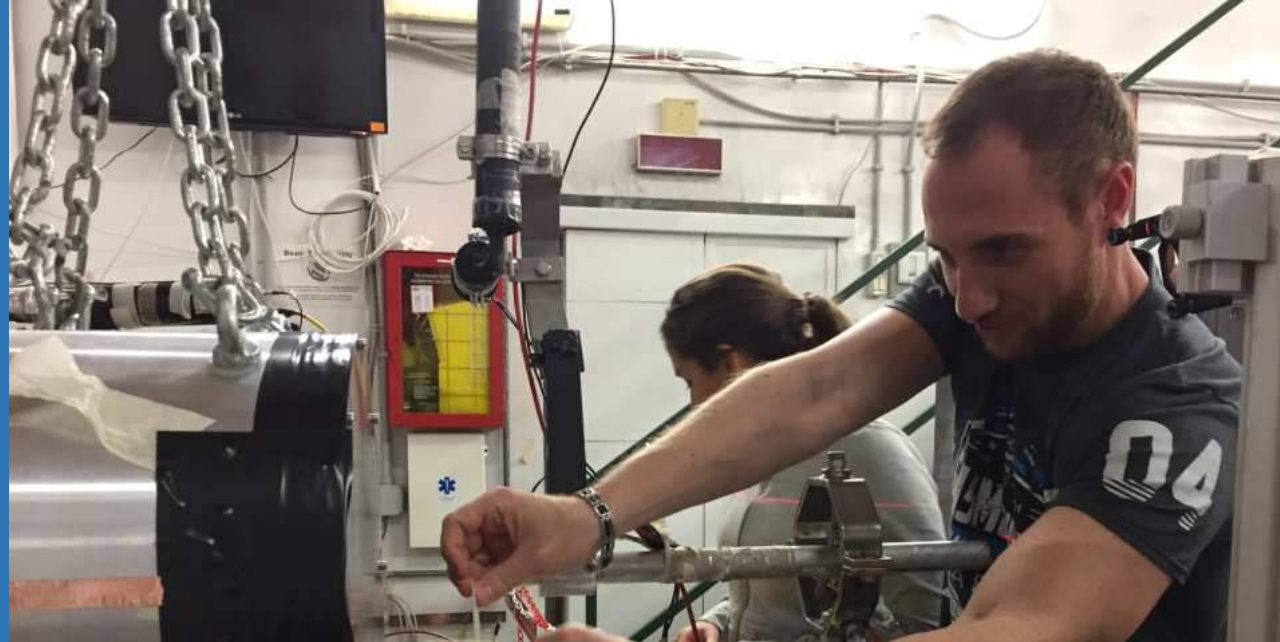


Calibration system @ CalTech (CA, USA)



Calorimeter reduced scale prototype

Assembly & test @ INFN – Frascati Rome (Italy)



International Calorimeter Team!

Italy (INFN), USA (CalTech + Fermilab), Russia (Dubna)

