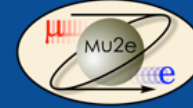
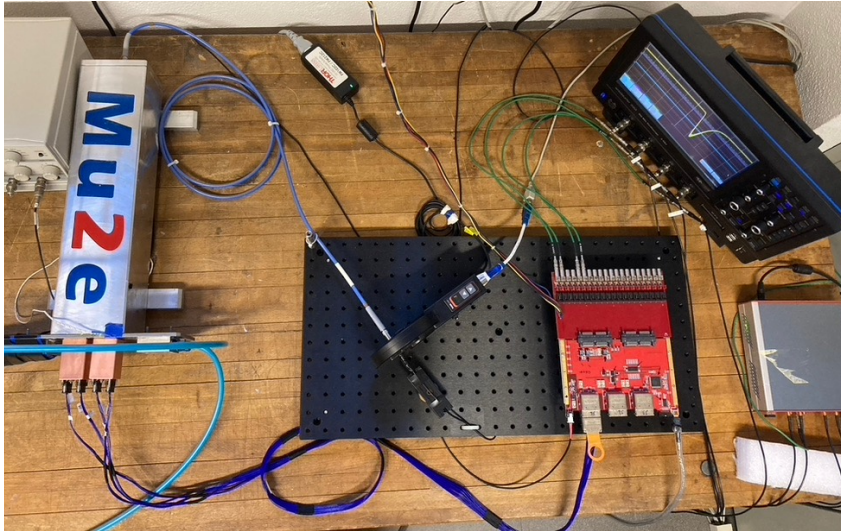


An automated QC station for the calibration of the Mu2e Calorimeter Readout Units



Elisa Sanzani on behalf of the Mu2e Calorimeter group

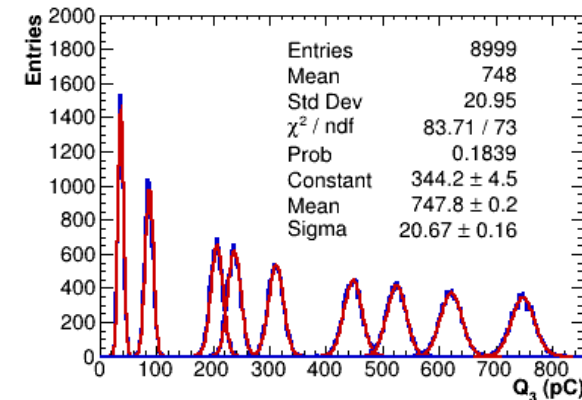


Mu2e CsI Crystal Calorimeter Readout Unit (ROU):

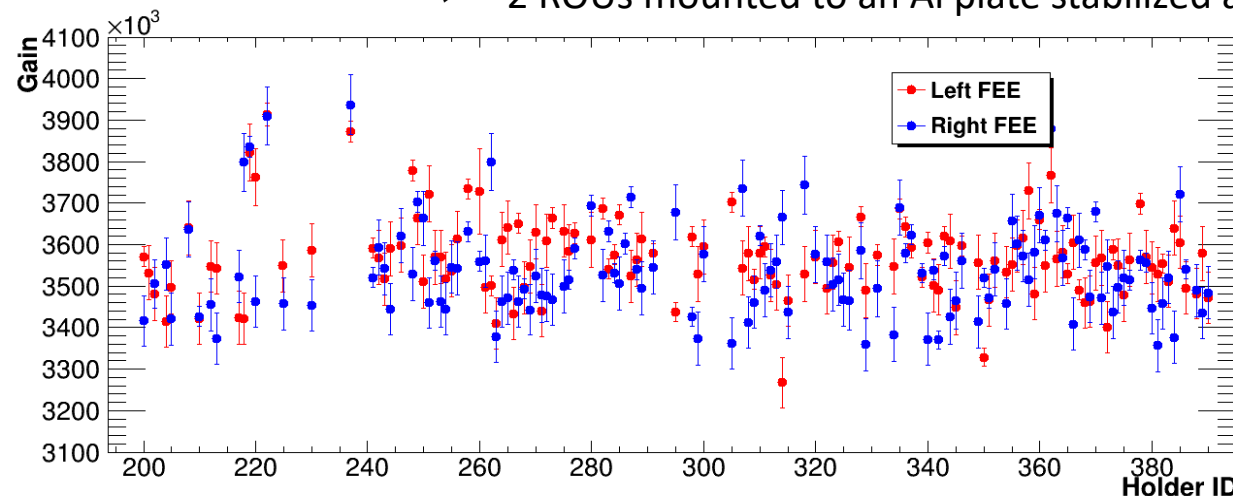
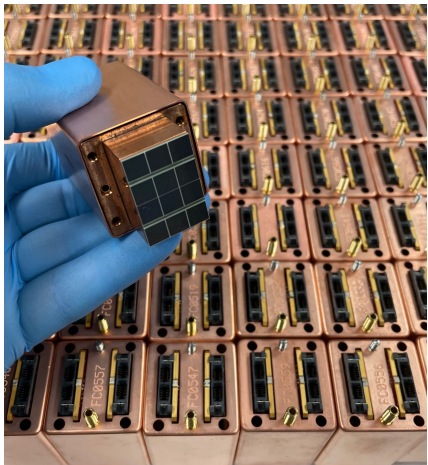
Two 2x3 SiPM matrices, two Front End Electronics boards, copper holder and Faraday cage

⇒ Characterization of the ROUs with the QC Station

⇒ Study of SiPMs Gain, Photon Detection Efficiency and charge at different light intensities and bias voltages



- ✓ 420 nm Blu LED
- ✓ 9 position filter wheel to attenuate the light intensity
- ✓ Sandblasted glass layers to diffuse light, in a box to ensure light tightness
- ✓ 2 ROUs mounted to an Al plate stabilized at 25 °C



- ✓ Gain spread 2.5%
 - ✓ Reproducibility 2%
 - ✓ Mean gain $3.6 \cdot 10^6$
 - ✓ Full characterization of the ROUs
- ⇒ Complete knowledge of the ROU response during operations