



U.S. DEPARTMENT OF
ENERGY



EIC Beamline R & D Status

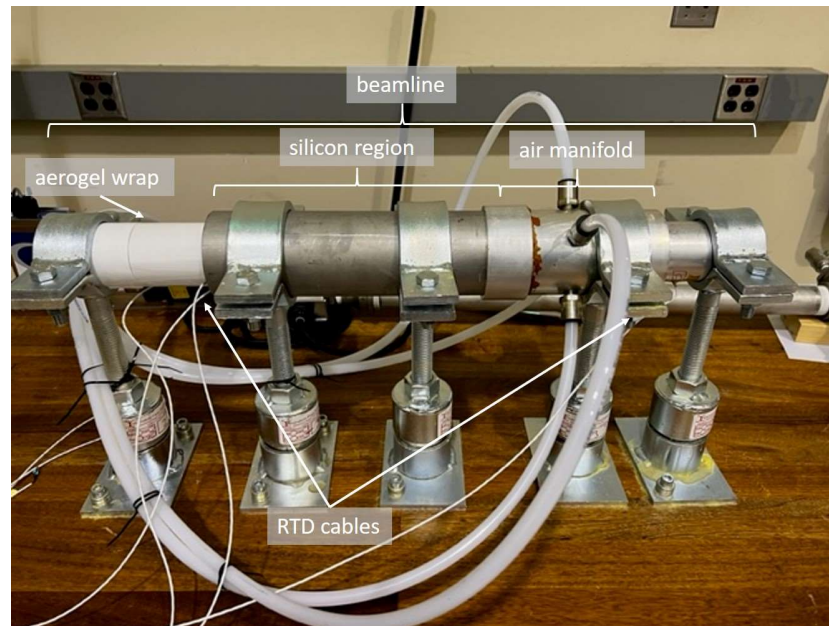
Detector Support Group
March 22, 2023

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EIC

Brian Eng, Pablo Campero, George Jacobs, and Marc McMullen

- Started reassembly of test station controls system using a National Instruments cRIO 9067, 8-channel, programmable, automation controller
- Started upgrading the test station controls and monitoring software
 - ★ An additional RTD will be located on the heater pipe
- Ordered a 1500-W mineral oil immersion heater, which will be controlled by the software instead of a traditional thermostat
- Set up *Ansys Fluent* to perform thermal simulations of the test stand beampipe
 - ★ Ran simulation with air flow velocity of 1.6 m/s
 - ★ Analyzing results
- Reviewed CAD model provided by LANL with new engineer Chinmay Andhare



Reassembly of the simulated beam line with aerogel wrap added to the inner pipe