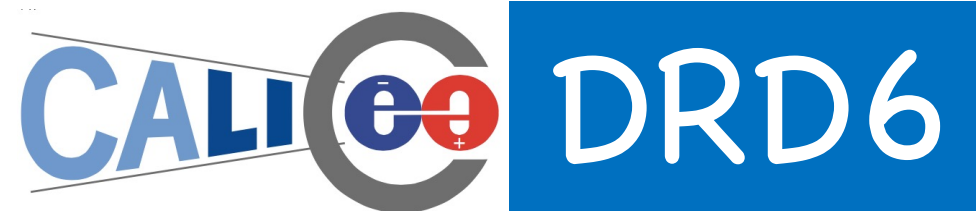
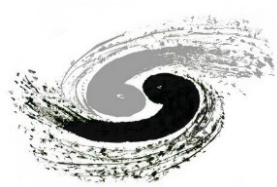


CALICE at PS-T09: second week status and wrap-up

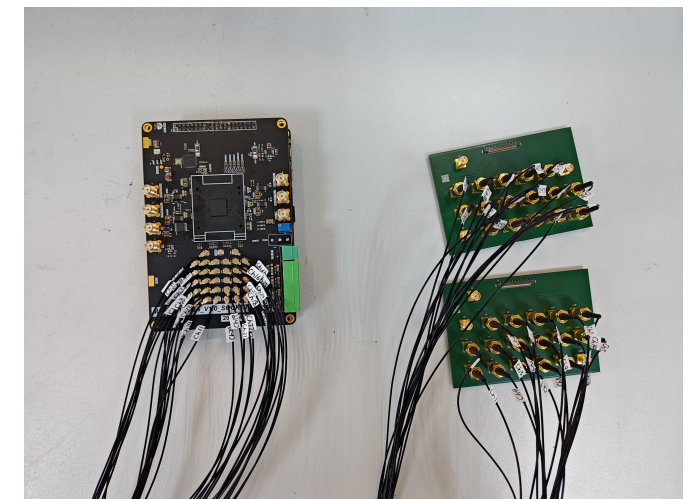
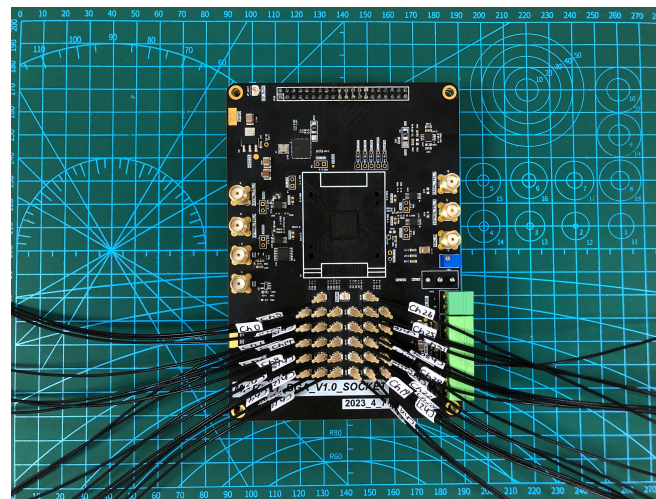
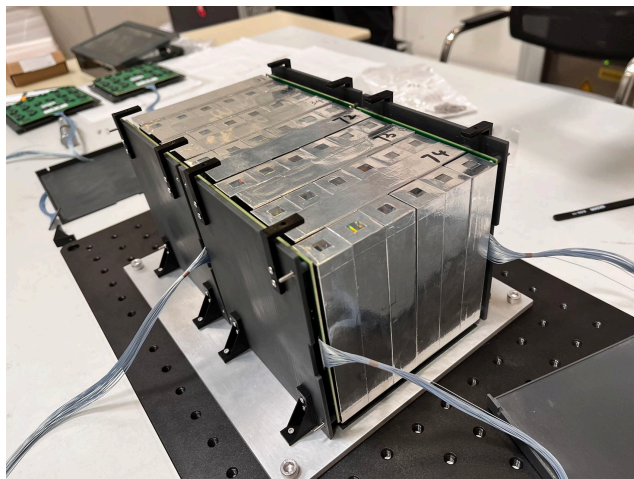
Yong Liu (IHEP),
for the CALICE and DRD6 WP3.1.1 Calorimeter teams
July 11, 2024

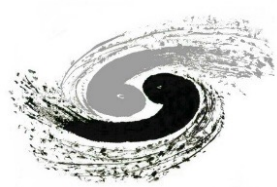




Second week at PS-T09: July 4 - 10

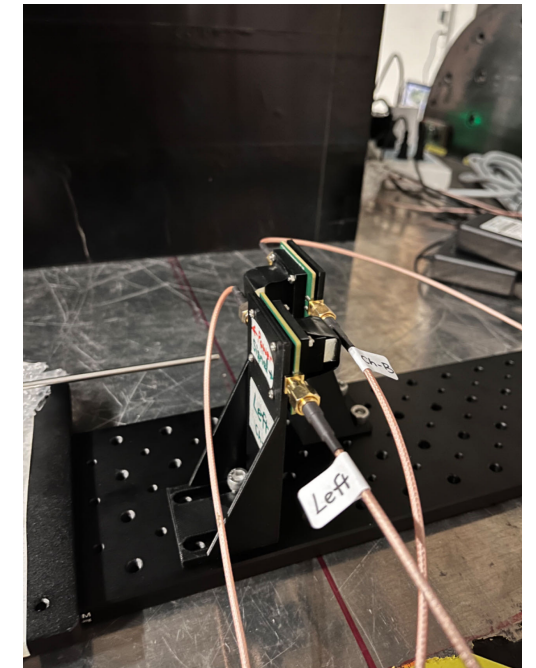
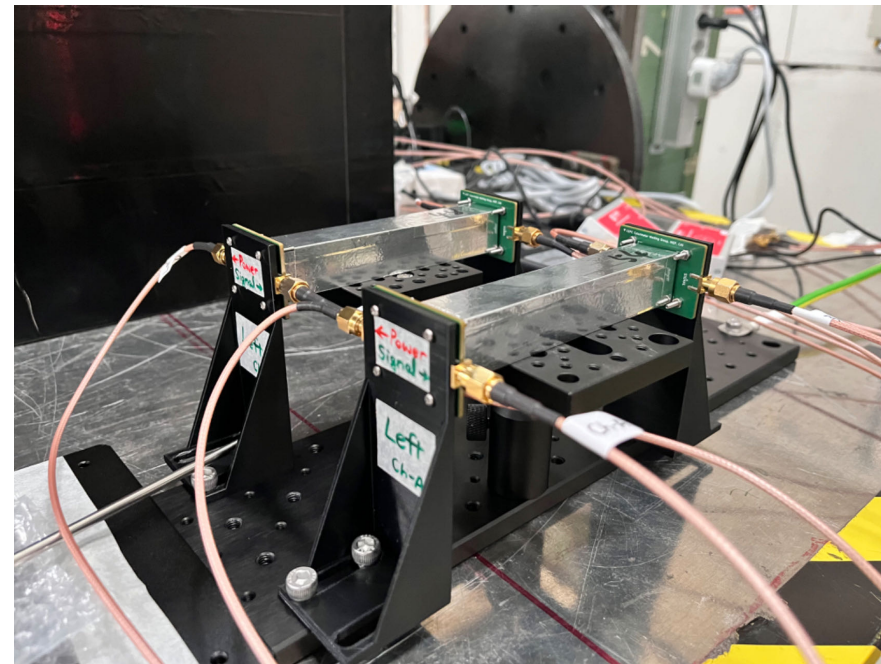
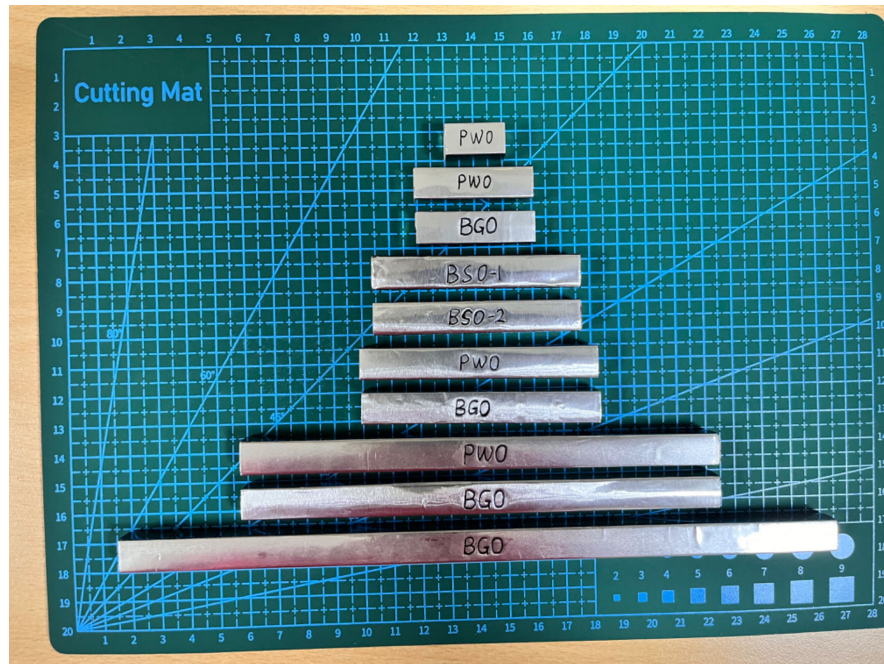
- Smooth data taking: crystal calorimeter prototype
 - Muons: 5 GeV for MIP calibrations
 - Electrons: 1 – 10 GeV energy scans for EM performance
 - Pions 1-10 GeV for π/e response ratios
 - Beam collimator slits: impacts from momentum spreads
 - A new SiPM-readout electronics chip (32-ch)

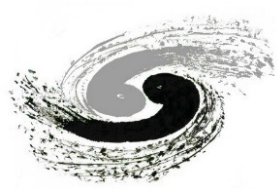




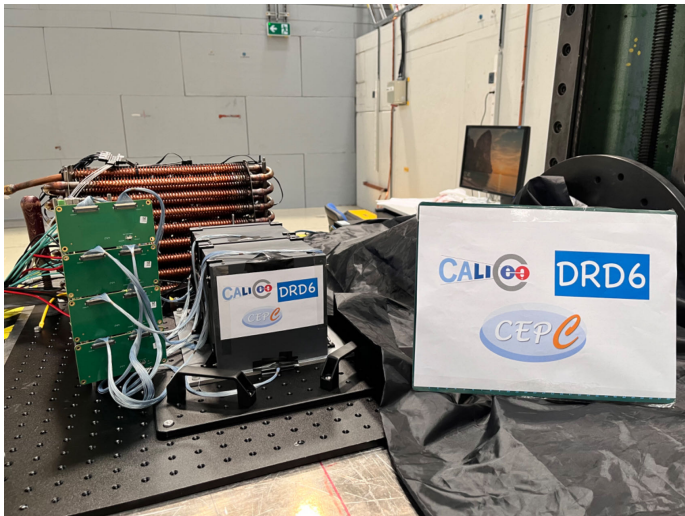
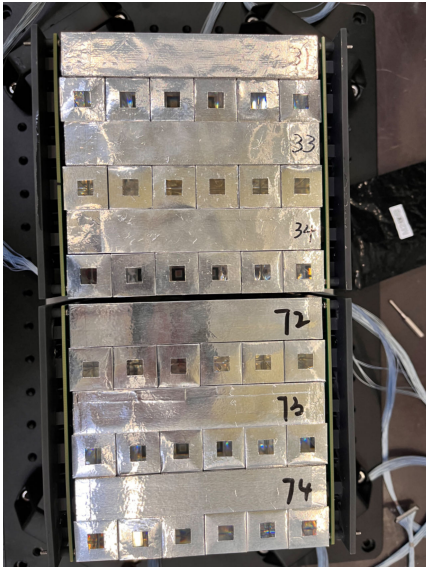
Second week at PS-T09: July 4 - 10

- Timing studies with crystal-SiPM units
 - Crystal bars with different lengths
 - Several combinations of SiPM and preamp types
 - Oscilloscopes: 5 GS/s and 16 GS/s





Brief summary



- Successful beamtest for first crystal prototype and units
 - Collected decent statistics of data samples
 - Enabling EM and hadronic performance and shower studies
 - Timing performance with various crystal lengths
- Acknowledgements
 - PS/SPS coordinators
 - Andre for the mini-chiller and helpful discussions
 - Dipanwita for many helpful suggestions for PS-T09
 - Aboubakr for local technical support