

A photograph of the interior of a particle detector, showing a dense array of colorful fiber optic cables (blue, green, red, yellow) and a central white cylindrical structure. The perspective is looking down a long, narrow tunnel-like structure.

MVTX plans in 2026

Cameron Dean
MITHIG group meeting
October 10th 2025



Plans

- sPHENIX aims to end data taking between January and April 2026
- MVTX will be the third detector uninstalled (after sEPD and MBD which take ~1 day each)
 - Anticipate uninstallation anytime between February and May 2026
 - Anticipate it will take 3 weeks of almost constant work
 - 1 week for the MVTX, 2 for cables and racks
 - Need around 5 people (including techs) to remove the MVTX. MIT could supply 2 or 3 people, more would get the scaffolding too crowded
- After removal, JLab and CERN/AMBER are interested in the MVTX

Plans

- After removal, JLab and CERN/AMBER are interested in the MVTX
 - Personally, I don't see AMBER as realistic due to shipping the MVTX over the Atlantic AND the MVTX belonging to DOE (ALPIDEs were given to sPHENIX under export control restriction only, according to Ed O'Brien)
 - JLab are interested for:
 - CLAS12
 - SoLID
 - Small TPC experiment
 - Contacts:
 - Bryan McKinnon (CLAS12, University of Glasgow)
 - Rachel Montgomery (SoLID , University of Glasgow)
 - Bill Li, (SoLID?, Mississippi State)
 - UC Riverside
 - Apparently Zhaozhong too

Letter of Intent: Open Charm at JLab with the sPHENIX MAPS tracker

Miguel Arratia* and Sebouh J. Paul
University of California, Riverside

Yuri Gotra
Thomas Jefferson National Accelerator Facility

Hayk Hakobyan
Universidad Tecnica Federico Santa Maria, Valparaiso, Chile

Bryan McKinnon
University of Glasgow, Glasgow, United Kingdom
(Dated: May 8, 2024)

Timeline

- I met Rachel Montgomery when I was back home (September 25th 2025)
- Discussed with Ed O'Brien last week who said it's a DOE decision, but he'll assume Jlab will be the destination for now
- Rachel was discussing with SoLID spokespersons on Wednesday (October 7th), I've yet to receive a summary
- It's thought that the detector can be used at CLAS12 while the spare staves can be used for the other projects
- Glasgow were interested in assisting with the MVTX uninstall and could provide up to 3 techs
- Plan would be to have the MVTX at JLab in Summer 2026
- Likely need 2 or 3 weeks for setup and knowledge transfer
 - Could be Cameron (+ 2 students?) at JLab
 - UoG *hinted* that a labour reimbursement may be possible