

fSTAR f2f meeting
Goals for the Prototype Test at
STAR

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for the BNL Group**

Goals

- Data Acquisition
- Gas System and Safety
- Slow Controls & Archive Database

- Tests includes in Clean Room and in West Platform

Plan for 30 x 30 prototype

- In the Clean Room
- Use Alexei's gas mixing system, need to renew the approvals
- Use scintillators for triggering

- Use FOBs and ROB for DAQ integration tests
- Start with one FOB and a ROB with smallest mini-SAS cable
- When we have better understanding add more FOBs and 6 m mini-SAS cable to prototype
- 30 x 30 prototype can take 6 FOBs

Plan for 60 x 60 prototype

- In the Clean Room prepare for the TPX (TPC) electronics for full chamber readout
- Mount the prototype to the frame
 - In the frame
 - Gas sniffers
 - Gas distribution assembly
 - TPX and TPC RDOs
- Move the frame to the West platform
- Get the safety approvals
- Evaluate the Gas System, measure efficiency
- When the sTGC electronics (VMM) ready after clean room tests and the Gas system tests are satisfactory (Efficiency xx%)...

Plan for 60 x 60 prototype

- When the sTGC electronics (VMM) ready after clean room tests and the Gas system tests are satisfactory (Efficiency xx%)...
- Remove TPX and install sTGC electronics (FOB & ROB) to 60 x 60 prototype
- How many FOBs and ROBs available for test at STAR?
 - Need 30 FOBs and 5 ROBs for full readout
- Continue to evaluate the full (DAQ and Gas) system until end of the run

Gas System

- Get the approvals to operate
- Evaluate the performance (over long time) of gas mixing and interlocks
- Establish operations and procedures, and educate shift-crew

Slow Controls & Archive Database

- Exercise the HV slow controls and evaluate the performance
 - With shift crew involvement
- Establish readout from various gas mixing component for archive
- Work with STAR database administrator to archiving the parameters



30 x 30 prototype

60 x 60 prototype