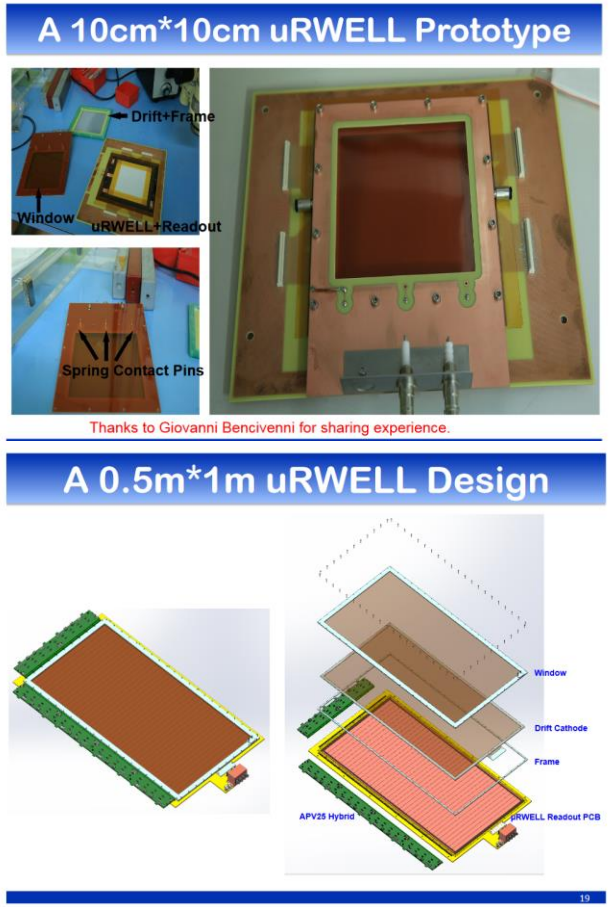
USTC

2018 RD51 test beam

USTC main activities

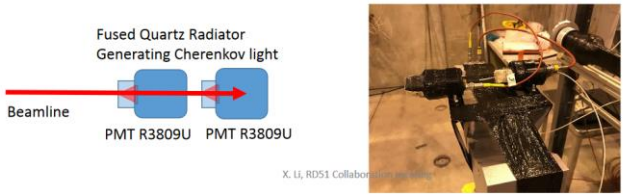
April test beam: uRWELL , FTOF and PICOSEC (ref to PICOSEC contribution)



https://indico.cern.ch/event/502161/contributions/2261772/attachments/1322924/1984686/08_GEM_Progress_USTC_Aug2016.pdf

A FTOF prototype consists of quatz radiator, two MCP-PMT and Readout electronics.

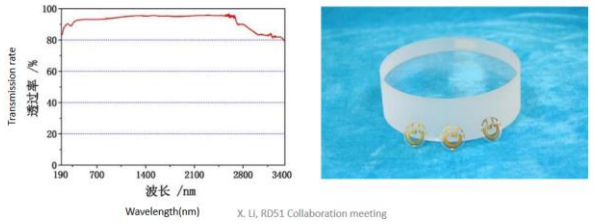
- Quatz Radiator: JC-H02 fused silica from Quartz & Special Glasses Institute(Beijing)
- MCP-PMT: Recent R3809U from Hamamastu, R10754 in the future
- Readout electronics designed by USTC: Programmable Differential Amplifier(PDA) LMH6881/2 and Dual-threshold Differential Discriminator(DDD)



Quartz & Special Glasses Institute(Beijing)

Material:
JC-H02 pure quartz glass (metal impurities <1ppm, the quartz glass uses silicon tetrachloride as raw material, transmission index from far ultraviolet to near-infrared spectrum)

Specifications:
- Spectral transmission index(190~3300nm)
- roughness: <0.6nm
- flatness: subsurface damage <20um



https://indico.cern.ch/event/667256/contributions/2735968/attachments/1530213/2395914/RD_of_FTOF.pdf

Beam Periods & needs

- April/May: Yes
- August: most likely
- October: it will depend on previous periods.

- uRWELL:
  - Gas (Ar/CO2 93/7)
  - High Voltage
  - Tracker+4APVs for urwell+DAQ
  - Beam: muons/pions

- Picosec and FTOF:
  - Picosec setup (gas,trigger, tracker,daq,..)
  - HV/LV (we will provide details)
  - Preamp & scope to discuss with you