

## A Homework List from PHENIX Review - MJL:

- Crisper physics case
  - identify which measurements substantially enhanced or only possible with FVTX and how these connect to important physics questions
  - clearer story on how well FVTX works for these measurements
- Identify & exhibit prototype progress
  - show what we have in lab and where it fits in FVTX progress
- Convince folks that PHX can be read out & cables fit
  - better definition of DAQ readout scheme and its difficulty?
  - more explicit definition of how cabling will work & fit
- Use 300  $\mu\text{m}$  (not 200  $\mu\text{m}$ ) thick sensors
  - find out technological challenge of 300 vs 200  $\mu\text{m}$
  - switch to 300  $\mu\text{m}$
- Demonstrate operation in AuAu central events
  - give detail on quality of track matching
  - Kalman filter track fitting with muTr (& with NCC, MuTrig?)
- Integrated simulations of all forward upgrades
- Quantify punch-through rejection scheme and how well it works.

## Homework list continued - MJL

- Show what measurements need a FVTX trigger
  - what triggers and how well they will work
  - integration with other forward upgrades
  - technical & cost details
  - how it will be funded; is it separate project?
  - get details of technical scheme and performance estimate from ISU
- More comprehensive rate and trigger calculations for RHIC-II and RHIC-I
  - added Appendix with rates and trigger rejections
- Discuss the merits of one vs two FVTX endcaps (add in Exec. Summary)
- Add physics discussion of reaction plane and flow
  - physics section from Gerd added
- Identify project EE-engineer?
- Enlarge collaboration
  - ANL?, BNL?, France?, FSU?, ??
- Address all "inline" comments in FVTX proposal document