AIPINJ topics for discussion, July 11 2019

Gun region

1. Y-chamber
   1. leak checked yet?
   2. give to Scott to vacuum degas
2. 15 deg dipole
   1. Plan A is repurpose DS
   2. Plan B requires buy-in, and engineering design, fabrication, QA
3. BPM’s
   1. Plan A : keep what we have, tally total # needed
   2. Plan B : assessing strip-lines (e.g. HallD/UITF ) for future capabilities
4. Wien filter E-field – Plan A (re-purpose CEBAF Wien filters)
   1. waiting on 40kV feedthroughs, new spring connector, test using UITF Wien
   2. Need to make spare coils
5. Wien filter HV controls
   1. PS and switches are in hand
   2. INC owes high level wiring schematic, finalize layout/connector, buy parts
6. Wien filter B-field – Plan A (re-purpose CEBAF Wien filters)
   1. Need to make 3 more pairs of coils
7. Wien filter PS controls
   1. Install 20A supplies + cable drops
8. NEW Wien Quads
   1. Added ~3” placeholders, need to assess optics solutions and define requirements
   2. Quad design, fabrication, QA…long lead time item
9. OLD Wien Quads
   1. Store on shelf, right?
10. Prebuncher
    1. Does it have sufficient bunching gradient, do you need to test in Aug/Sep ???
11. DP CAN
    1. New NEG’s?…order now
12. PCUP/Viewer assembly
    1. Repurpose as-is, right?
13. A1/A2
    1. I would like this remotely controlled, either IN/OUT or holes/OUT, for PQB
    2. Re-purpose the A1 cube, w/ steering coil? If YES, does it work for 200kV?
    3. Is A1-A2 distance a requirement, or a convenience?
    4. Will determine to decide if PSS kicker still kicks on to one of A1/A2
14. Viewers
    1. Replace chromox
    2. New YAG or BN screens, where?
15. Solenoid SOW
    1. Per budget, scope is only 7 beamline + 2 chopper solenoids + 2 spare coils
    2. On Joe’s plate now, if no time I will write
    3. Contact Albert Christopher
16. Earth correcting coil
    1. Do we re-add
    2. Would be nice to have an extensible design easy to assemble/disassemble
17. Vacuum
    1. Bake-outs - Do we have enough panels, electrical power, heaters, controllers to bake whole region to 200C and activate NEG’s reliably? Work a plan.
    2. NEG coating – Assess scope, define strategy, demonstrate process. Long road…

Chopper region

1. Plan A (re-purpose as much as possible)
   1. Remove captured solenoids
   2. Retrofit chopping chamber w/ new solenoids
2. Plan B (includes new chopping chamber)
   1. Remove captured solenoids
   2. Design new chopping chamber, fabricate chamber, parts, procurements
   3. Use new solenoids in design
   4. Improvements between cavity and chamber?

Booster region

1. Status of simulation, i.e. can we keep moving things or need to wait?
2. Can we decrease Chopper-Buncher & Increase-Buncher to A4, more space?
   1. One more solenoid after buncher?
   2. Add BPM/Steering coil after A4?
3. DP can
   1. Same question, new NEG’s? Buy them
4. Spectrometer line?
   1. Use a larger aperture chamber, agreed?
   2. Repurpose MBO on 1” pipe, so same controls for Jerry??? Or new BL???
   3. Bend inward, so easier to work on beamline/booster side???
5. Vacuum
   1. Eliminate VBV0I07, why do we need it?
   2. IP’s old/replace?
6. MAD coils
   1. Plan to purchase X haimson BH and/or HB as needed, okay?
7. Earth correcting coil
   1. Same question, modular design?