AIPINJ Phase I Jobs for 2021 (and beyond…)

**Wien Jobs**

* U-Wien “dummy for alignment”
	+ Top/bottom cores defines magnet plate, field clamps define magnetic axis
	+ Pick V-Wien orientation (since first one)
	+ Use longer washers and Teflon blocks, align electrodes as parallel as possible
	+ Check alignment process
* V-Wien
	+ Add new spacers, final align
	+ Bake, re-test HV?
	+ Ready for girder…
* H-Wien
	+ Fabricate new nickel plates, clean, anneal, provide to MMF
	+ Assemble into H-Wien, map axis, compare profile to V-Wien
	+ Pick one set of plates, call it done
	+ Start H-Wien rebuild => clean, assemble/align, bake, HV test, girder
* 3d electrodes
	+ (2) resurface electrodes returned, (4) more to come?

**Magnet Jobs**

* MFX – (3) tested, mounted, dressed, measured, ready, (3) available for Phase 2
* MFY – (2) available for chopping chamber
* MHD – (8) tested/ready on A1/A2, (4) on dummy to dress/fix gap, need bake clamps
	+ Lakshmi is asking for dummy cube measurements….see Riad/Mike/Joe
* MDR – (2) dipole QC ok, (1) mapped and Jay checking if OK, then map second
* MQW – (16) coils rec’d + (16) more coming => (4) ready for pick-up for fit test
	+ Was the QC done on those ready for pick-up?

**Kicker Jobs**

* Complete coil PO => Awarded to Technicoil (12/17/20), great!
* Design/fab supports
	+ Lakshmi is waiting on drawings per 11/2 model, will evaluate terminal block

**Other Pre-Assembly Jobs**

* Viewers
* (4) Quad crosses: (2) coils + (1) viewer + (1) IP + (1) window + (1) 6-way weld flanges

**Can we assemble Wien girder?**

* (3) bpm => Done
* (2) Wien filters => V-Wien (~75%), H-Wien (~25%)
* (4) Quads crosses => 0%
* Prebuncher => Done (but Mark will test until late January)

**Can we assemble A1/A2 girder?**

* (2) valves => on hand
	+ (1) DP can => on hand
	+ (2) bpm => on hand
	+ (1) viewer + PCup combo => rebuild viewer
	+ (1) yag / (1) harp => rebuild viewer
	+ A1 cube => Marcy fixed shorting issue, so gronk/align/calibrate
	+ A2 cube => Finish calibration

**Load-Lock Gun to Y Jobs**

* Safe the photocathodes
	+ Vent suitcase, remove pucks, check manipulator stroke
	+ Move suitcase to tunnel, attach to tee, bake tee/suitcase w/ suitcase valve open
	+ Vacuum good? Open prep valve, move photocathodes to suitcase, close valves
* Bake prep
* Bake HV/NEG and Y

**Remaining ME Jobs**

* Drawings
	+ Songsheet from Chase
	+ MHD coil tabs req’d rework to fit tightly
	+ Viewer assembly?
	+ Gun 5mm closer to valve…maybe update with 2B?
	+ Longer washers for Wien spring hangers
* Remaining Jobs
	+ MHD, MQW protective clamps
* “New” Jobs
	+ Help Shukui design/fab new small outrigger box, can use table
	+ Hep us show girder tray, LCW, etc on 3d model to decide/choose
* Installation
	+ Do we have all final assembly drawings?
	+ Does Chris have all final “points?”

**Installation Steps**

* Girders
	+ A1/A2 + FC#1 + choppers
	+ Wien girder
* Steps
	+ Pre-assemble on girder in TL
	+ Move to tunnel
	+ 2A align
	+ Vacuum hookup, pump down, leak check
	+ 2B align
	+ Bake
	+ Leak check

**What comes after Phase 1?**

* Chopping chamber rebuild is approved for next SAD
* Complete design of Phase 2 beamline
* Fabricate new Phase 2 beam line components