**TODAY = FEB 5 2018**

**Now – March 23 : Physics Run**

**MAINT/PSS**

**March 26 – April 6 : Two weeks shutdown**

* PSS Certification (early 3pm lock-ups)
* Chopper RF conditioning for 200kV, assess beamline for 200keV ops
* Bubble Installation
  + Installation move Bubble chamber to Injector, as before
  + Phil/Bubba vent Bubble beam line, install harp + ceramic break
  + Survey/Alignment position Bubble chamber + harp + radiator
  + Tony instrument/HCO harp
  + John install Bubble laser shutter, integrate w/ Bubble

**PQB + BROCK**

**April 8 – May 20 : PQB/Brock (INJ and INJ/NL)**

* PQB Study – INJ and INJ/NL required
  + Part1 – RTP on laser table, thermal stability, requires DAC
  + Part2 – 25uA to FC1/FC2, PITAPos calibration, test feedback
  + Part3 – 70uA to FC2, test feedback again
  + Part4 – PQB for Wien flip (off, left, right), and if PITAPos helps
* Brock Test/Visit – INJ only
  + Joe return receiver transmitter to Brock for fixed gain adjustment
  + Brock on-site (second week) for next cavity study
  + Deliver TE011 cavity

**BUBBLE ENGINEERING**

**April 23 – May 6 : Bubble run (INJ/NL)**

* Run schedule
  + DAY – accelerator setup and test activities
  + SWING/OWL – Bubble commissioning and data taking
* Accelerator support

**200 KV GUN + 350 KV HVPS**

**May 7 – June 22 (INJ) – 7 weeks**

* Install Gun2 & NEG tube using existing PSS/150kV Glassman HVPS
  + Complete pre-test gun studies at UITF end by May 1
    - Commission/condition UITF w/ 200uA? w/ bulk 5mm mask
    - Activate SLSP, 5mm mask, good dark lifetime
    - Evaluate John’s QE scan method
    - Operational lifetime at @ 200keV
  + Gun HV chamber
    - Plan A (entire chamber=less work) or Plan B (only electrode=more work)
    - Rework overboard IP as known
    - Krypton gas and plumbing hardware
  + NEG tube
    - Nipple w/ solenoid NEG coated
    - Two leak free BPM’s NEG coated
    - Optical alignment (Pete) and Gabou (Musson) if time permits
    - Survey/Alignment – pre-assembly beam pipe
  + Bake w/ standard oven+NEG heater controls, elec. activate NEG
  + Initially, condition w/ existing Glassman 150kV HVPS, and make beam
* Install Glassman 350kV HVPS and use for 200kV operation
  + SF6 tanks
    - Status of SF6 plumbing/pressure system
    - Status/plan for idea to bias stack
    - Assemble stack, position tank, use short, load SF6 in tunnel
  + HVPS Controls
    - Finalize PSS/controls interface chassis, fabricate
    - Status Glassman software (Scott)
    - Status Glassman OSP (Joe/Matt)
    - Cutover/PSS Certification/HVPS commissioning
  + HV gas condition Gun2 to 200kV, and make beam

**200 KEV BEAM PERFORMANCE**

**June 25 – Aug 3 (INJ/NL) – 6 weeks**

* Full injector setup w/ new gun+supply @ 130 keV
* Compare performance of NEW gun, but w/ scaling energy from 130keV vs. 200keV
  + Settings and limits
  + Beam quality (energy stability, SC growth long/trans)
  + Lifetime
  + Second round PQB evaluation

**BUBBLE**

**August 6 – August 12 (INJ/NL) – 2 weeks**

* Bubble run