

# Schedule for Single Tile Facility

Marcel Demarteau, Henry Frisch, Ron Kmak, Marc Kupfer, Zeljko Matijas, Ed May, Sasha Paramonov, Leon Reed, Bob Wagner, Dean Walters, Junqi Xie, Zikri Yusof



### **Sub-Tasks**

- Lab Infrastructure
  - · Water, vacuum, gas, hoods, cleaning stations, ceiling, paint, ...
- Vacuum chambers & transport
- Tile Base & Internals Station baking, scrubbing, testing(?)
- Top Window Preparation Station
- Photocathode Evaporation Station
- Sealing Station



### Lab Infrastructure

- Purified Water Done
- Ceiling in progress complete during Dec. 2011
- Hood & Wall Partition Removal in preparation, complete by early Jan. 2012
- Cable trays Jan. 2012
- Gas lines and PVC rough vacuum lines
  - Installation in labs: Jan–Mar 2012
  - Service floor gas manifold & cylinder storage: Jan-Feb 2012
- Cleaning stations
  - Ultrasonic: Feb 2012
  - Dry nitrogen: Mar 2012
- Rough vacuum
  - Spec & order pump Jan 2012
- Desiccator storage Installation Feb/Mar 2012
- Electrical
  - Specify 220V, 480V power needs Feb 2012
  - Modifications Feb–Mar 2012



# Vacuum Chambers & Transport

- Vacuum Chamber Design in progress
  - Request for quotes Jan 2012
  - Let purchase requisition Feb 2012
  - Delivery & installation Apr/May 2012
  - Incorporation of processing stations May–Jul 2012
  - Commissioning Jun–Aug 2012
- Transport Arms
  - Spec Dec 2011
  - Let purchase req. Jan 2012
- Gate Valves Purchase req. routed Dec 2, 2011



#### Tile Base & Internals Station

- Design Jan/Feb 2012
- Quotes for parts Mar 2012
- Fabricate in house parts Mar–Apr 2012
- Scrubber, if necessary
  - Design Feb–Apr 2012
  - Quotes for parts May 2012
  - Acquire hardware Jun–Jul 2012
  - Integration Aug 2012



# **Top Window Preparation Station**

- Design late Jan Feb 2012
- Quote for parts Mar 2012
- Purchase requisition & fabricate in house components Mar/Apr 2012
- Integration May 2012
- Plasma cleaning ??? (\$\$\$)
  - Possible to use new SPEC oxygen system?



# Photocathode Evaporation Station

- Options:
  - 1st tile made with bare top window UV excitation?

Is Quartz Possible?

- 1st tile made with aluminum photocathode UV excitation?
- 1st tile made with bialkali (K2CsSb)
- Shoot 4" photocathodes in chalice Jan/Feb 2012
- Design of 8" photocathode station Jan–Mar 2012
- Decision to proceed with scale-up of chalice Feb/Mar 2012
  - Quote for parts Apr 2012
  - Fabrication May/Jun 2012
  - Integration Jun–Aug 2012



# **Sealing Station**

- 4" Sealing tests Jan 2012
- Modification design of existing thermopressure sealing equipment Feb/ Mar 2012
- Completion of sealing tests in Bldg. 208 Apr 2012
- Modification of sealing equipment May–Jun 2012
- Installation & integration Jul–Aug 2012

