ILCTA-MDB Status
1.3 GHz RF Power
Meson Detector Building

3.9 GHz RF Power AO Building

September 21, 2006

[John Reid]

#### 1.3 GHz RF Update

#### Capture Cavity II Status

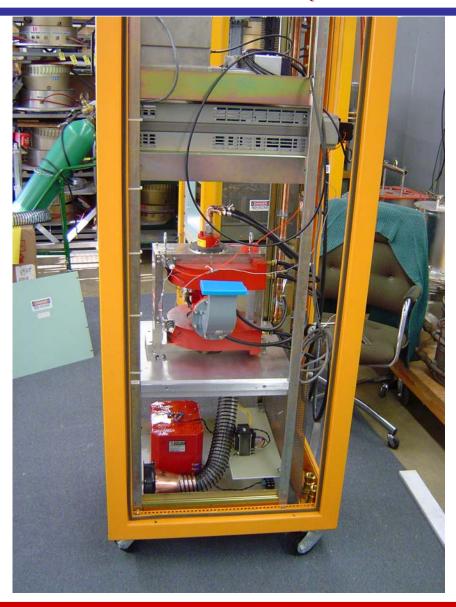
- Cavity warmed up on 9-11-06 to perform scheduled repairs to tuner motor and address low frequency modes.
- Cryomodule end plates will be removed by the middle of next week.
  - > 18HZ and 180 HZ modes will be addressed by adding intercepts on bellows.
  - > Failed Sanyo tuner motor will be replaced with a Fpytron motor.
  - Additional instrumentation will be added while cryomodule is open.
  - > Estimate ~ 2 months to complete.

#### 1.3 GHz RF Update

### 300 Kwatt Klystron Status

- On 4-1-06 installed one of two rebuilt YK-1240 klystrons to replace original power limited (~100 Kwatt) klystron.
  - Conditioning took about 2 weeks to achieve full power (300Kwatts @ 60Kv gun voltage) at 1.5 msec rf pulse.
  - > Ran without problems powering CC-II since installed.
  - Only reason to remove it is to test the second rebuilt YK-1240.
- The second rebuilt (YK-1240) tube will be installed next week.
  - > Conditioning will start 9-25-06.
  - Dummy 50 ohm load has been installed on waveguide.
  - > If all goes as well, conditioning will take about 2 week.

# 80 Kwatt Klystron



### Work in Progress

#### 3.9 GHz 80 Kwatt Klystron

- > Components assembled into relay rack.
  - Water manifolds fabricated and installed in rack.
  - Filament transformer installed.
  - Solenoid power supply installed in rack.
  - Ready for installation at AO.
- 3.9 GHz waveguide components
  - > All components in house.
    - Circulator installed at AO
    - Some WR-284 installed
    - Awaiting arrival of coupler test stand to finish waveguide connections.

## Modulator



# Modulator - HV Compartment



# 70 KV Charging Supply



### Work in Progress

- 60 KV modulators.
  - > Fabrication complete.
  - Undergoing final electrical testing at MI-60.
  - > One will ship to AO on 9-22-06
- 70 KV charging Supply.
  - > Fabrication complete.
  - > Undergoing final electrical testing at MI-60.
  - > Ship to A0 on 9-22-06.