ILCTA-MDB Status 1.3 GHz RF Power 3.9 GHz RF Power Meson Detector Building June 15, 2006

[John Reid]

ILCTA-MDB RF Power Status 6/15/06

Reid

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1.3 GHz RF Update

Capture Cavity II Status

- Installed rebuilt klystron (S/N: V108SK-8) into solenoid at Meson Detector Building on May 26, 2006.
- Started conditioning klystron the afternoon of May 26 with low filament power.
- Started HV conditioning on June 1.
- Ended HV conditioning on June 9.
- Klystron operating at -60 KV produces 287 Kwatts.

1.3 GHz RF Update

Capture Cavity II Status

- On June 10, 2006 coupler conditioning resumed.
- To first order, coupler Multipactoring remapping remains the same.
- Ran coupler with cavity warm and off resonance to 225 Kwatts with a bias voltage of + 1400 (250 uSec rf pulse).
- Cryo is cooling down the transfer line and should already be cold (June 14).
- CC II will cool down quickly once input coupler conditioning is complete.

Work in Progress

- 3.9 GHz 80 Kwatt Klystron
 - > Presently assembling components into relay rack.
 - Water manifolds fabricated and installed in rack.
 - Machine shop is fabricating mounting plate for klystron.
 - Filament transformer + Sola ready to install.
 - Solenoid power supply installed in rack.
 - Ready for installation at AO by mid July.
- 3.9 GHz waveguide components
 - Most components in house, ordering some additional components for coupler testing & Horizontal Dewar.
 - WR-284 waveguide switches
 - Stub tuner
 - Dummy loads

Work in Progress

• Two additional small 60 KV modulators.

> At 45 % complete.

- Made good progress the last 2 weeks now that we have our two PPD people back from shutdown.
- Building one additional 70 KV charging Supply.
 - > At 15 % complete.
 - > No real progress this past month.
 - > Concentrated efforts on modulator fabrication.