Weekly Report – week of May 9, 2011
Fabrication and Assembly of ERL hardware
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Cryogenics: The installation of the cryogenic transfer lines along with wiring of level and temperature sensors to support the ERL and VTF cryo refrigerator continues. Termination of the numerous wires pulled last week continues. This will tie the refrigerator to the control racks in the condo area.

Laser: Design work on timing system and interface with low-level RF and diagnostics software continues. Testing control software for laser transport mirrors is in progress.

FPC conditioning: The FPC's for the ERL were delivered to BNL for testing this week. The bakeout has been completed and adequate vacuum has been established for conditioning. The waveguide and water cooling hook-ups have begun.

Photocathode: The ceramic break has been installed in the sample holder. The arm will be installed in the deposition system next week. This will now allow current readings of subsequent samples. Cesium and potassium sources will be installed into the deposition system to produce a multi-alkalide cathode.

Gun Cryomodule: The gun and string assembly is in the crate ready to be shipped to J-Lab. The transport cart components drawings are complete and are into fabrication. In-house parts for the transport cart are being inventoried and inspected.

PASS System: The installation and testing of the VTF PASS system awaits electrical power to be hooked-up. We have had discussions on the associated sweep procedure and how to interface this into the PASS system.

Mezzanine: The electricians completed the installation of cable tray and conduit to connect the vacuum furnace to the required power source. Preliminary discussions have taken place for the routing of water cooling lines for the vacuum furnace. We are awaiting funding for the proposed clean room area under the mezzanine. Bid response have arrived for the cleanroom, funding still pending.

Large Grain Gun: Design review of the large grain gun was held this week and details of mechanical design were discussed.

5-cell cavity/cryomodule: The paperwork continues for the G-5 test safety review. There are now discussion on a June date for the next 5 cell run to test the LLRF feedback loop.

ERL injection line: Vacuum envelope is in preparation to final review, correction magnets are under design.

ERL Extraction line: Magnets are being fabricated, beam dump pressure vessel code compliance under evaluation, vacuum/instrumentation layout needs to be reviewed and finalized.

ERL Tech Support Area: The EEBA area is on hold due to funding issues. Design drawings and cost estimates have been completed. The BID packages have gone out for the construction of the enclosure and refurbishment of this area.

ERL Vacuum Support: Nothing to report for this week.