

# ML Planning for ILC08

First Pass

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# WG Charge – In 21 hours,

- Review current status of global ILC R&D and future plans, for both the baseline configuration as well as the supported alternative designs;
- Review and plan activities in and around Test Facilities (both existing and proposed);
- Identify and prioritize critical R&D milestones for TDP-1 and beyond.
- Promote and improve collaboration between groups working on ILC related R&D:

# TD Milestones

- April 2009 (KEK): Critical in-depth technical review by the Accelerator Advisory Panel (AAP)
- January 2010: Re-baseline of the ILC design, in preparation for TD Phase 2
- July 2010 (Paris): Publication of the TD Phase 1 interim report at ICHEP

# ML Topics – 9 hrs

- Progress on achieving gradient (S0)
  - Reports from three regions
  - TTC summary on topics on covered at ILC08
  - Status of alternatives (60 mm designs, large grain)
- Status of Facilities and Horz/CM testing (S1/S2)
  - Reports from three regions
  - S1 Global progress
- Toward Plug Compatibility
  - He vessel (material, pressure vessel constraints, ..)
  - Tuners
  - Couplers (OD, location, Q control, cryo losses)
- Cryomodule Design
  - Refinement of design in the three regions
  - Cryogenics optimization (heat shield, pipe sizes)

# ML Topics – 6 hrs

- HLRF/LLRF
  - XFEL HLRF test results
  - Status of alternatives (Marx, SBK, PDS at SLAC/FNAL and KEK, ATCA)
  - Klystron Cluster Concept
  - LLRF measurements at FLASH (9 mA progress and measurements of overhead contributions)
  - Discussion with CF on water cooling and cluster approach

# ML Topics – 4 hrs

- Quad Package
  - Magnet measurements at SLAC and FNAL
  - Magnets for XFEL
  - BPM progress
- Beam Dynamics and Wakefields
  - Summary of on-axis coupler and rf kicks
  - Linac alignment specifications
  - Dipole Mode Properties
  - HOM heating
- RTML
  - To be planned by Nikolay

# ML Topics – 2 hrs

- Preparation for AAP
  - Guidance from PM on scope
  - Tentative assignments of who will cover what
- Preparation for ILC08 closeout / overflow
  - Prepare summary reports