

ILCDR08 Working Group Charges

Mark Palmer
ILC Damping Rings Group



Working Groups

- As has already been described:
 - Focus on 2 principal topics: Electron cloud and low emittance tuning
 - Topics that are central to the CesrTA and ILC Damping Rings R&D program
- Working Group Charges:
 - Major focus is to identify the most critical R&D items required to enable the design and construction of a suitable damping ring for a future linear collider
 - Equally important is the need to develop a list of critical experiments that should be undertaken with CesrTA



Electron Cloud Group Charge

The charge to the Electron Cloud working group is to review the status of electron cloud simulations, both for electron cloud growth and for electron cloud induced beam dynamics, the benchmarking of the major codes against each other, and benchmarking of the codes against experiment. The group should also review the status of electron cloud measurement and mitigation techniques. Finally, the group should look at the worldwide experimental program and inputs that are required for the ILC and CLIC damping ring designs, paying particular attention to identifying tests that are needed as part of the CesrTA program.

Low Emittance Tuning Group Charge

The charge to the LET working group is to evaluate the status of optics correction and emittance tuning techniques, to review emittance measurement techniques that will be needed for damping ring optimization, and to review the world-wide experimental program in low emittance tuning. The group should, in particular, provide an evaluation of contributions that can be made as part of the CesrTA program and comment on how the efforts at various facilities world-wide can work together to provide confidence in the ILC and CLIC damping ring designs.



Some Final Comments

- The charges are ambitious
 - Geared to take a broad look at the experiments that will provide the understanding necessary to build a linear collider damping ring
 - Workshop provides an opportunity to review the full range of issues
 - Need to take the best possible advantage of the availability and flexibility of CesrTA over the next 2 years
 - Goal is to identify key issues where progress is needed
 - Particular attention to work that can be accomplished with CesrTA
 - Identify synergies with R&D going on around the world