

Cornell University Laboratory for Elementary-Particle Physics

ILCDR08 Closeout

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Cornell University Laboratory for Elementary-Particle Physics Comments from the CesrTA PM

- Working Group Summaries
 - Electron Cloud
 - CesrTA offers a unique opportunity to benchmark simulation codes over a wide range of parameters and to study both EC growth and beam dynamics issues that are critical for damping ring performance
 - Very promising recent results on mitigation techniques
 - Much remains to be done to ensure a viable (and economical) solution for the damping rings
 - Mitigation techniques and ring design must be integrated into an overall design
 - Significant questions remain on surface physics issues
 - CesrTA offers a chance flexibly explore the "integrated effect"
 - Collaboration support for further surface science studies could be very beneficial
 - CesrTA program will aggressively pursue a broad range of experiments to characterize the EC parameters that are necessary to provide confidence in the damping ring design



Comments (cont'd)

- LET
 - Range of techniques for achieving low emittance
 - Tend to be machine by machine
 - Explore and optimize procedures
 - Alignment and stability
 - Instrumentation
 - Work towards close collaboration among the groups pursuing low emittance operation

Collaboration

- This meeting offers the promise of very fruitful collaboration
 - Low emittance tuning
 - Work at CesrTA and ATF with major contributions from experts at other machines
 - Development of instrumentation to ensure successful and stable low emittance tuning
 - Electron Cloud
 - Simulations and comparison with data CesrTA offers a flexible test bed for studying a broad parameter regime
 - Development of measurement techniques
 - Confirmation of the necessary mitigation techniques



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Thank You!

• Most importantly:

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