

Accelerator R&D Wrap-Up

J. Rogers, Cornell University

- Progress to date
- Feedback wanted!
- Points of contact with current or planned R&D
- Summary

Progress to date

Lots of ideas are being refined!

- Beam size monitors (Vanderbilt, Albany, OSU, Cornell)
- Damping ring studies (Cornell, MIT/North Carolina A&T) 
- Backscattered photon beams for photoproduction (MIT/NC A&T, Penn State) 
- Damping ring design and technology (Cornell) 
- RF breakdown and pulse heating limit (Yale) 
- Polarized positron source (Cornell) 
- Beam simulations, emphasis on damping rings (U. Minn.)
- Flat beam studies and diagnostics at FNPL (NIU) 
- Superconducting RF studies (Cornell) 
- Source to IP beam and spin transport simulations (Cornell) 
- Global Accelerator Network (OSU, Cornell) 

 = draft supporting document

Feedback wanted!— from UCLC collaborators & external experts

Are these projects the best ones we can propose to get where the U.S. HEP community wants to go? **A 0.5 to 0.8 or 1.0 TeV linear collider.**

Are we making use of points of contact with others in the field?

- Experts at the labs.
- Current R&D at the labs (and universities).
- The DOE-related university R&D initiatives.

What are the outreach activities?

Are the details right?

- Scale of effort? Duplication?
- Requested funding *vs.* year?
- Uses of funding (*i.e.*, equipment *vs.* people *vs.* ...)?

We'll be scrutinized on all of these!

Points of contact with current or planned R&D

- Each of our proposed projects has a point of contact with others outside UCLC (outside expert, operating R&D project, the DOE-related university R&D groups).

- Database of accelerator projects deemed to be high-priority (T. Himel, D. Finley, J. Rogers):

<http://www-conf.slac.stanford.edu/lcprojectlist/projectlist/intro.htm>

- List of university participants in linear collider R&D (G. Gollin):

http://www.hep.uiuc.edu/LC/html_files/R_and_D_organization_RD_interests.html

Summary

- Real progress since first LCCOM!
- Feedback requested.
- On our way to an October proposal!