# UCLC Statement

## UCLC Briefing to the US LC SG Detector Review Committee

**September 9, 2002**

**David Rubin**
**Cornell**

# Motivation for UCLC

- In the wake of the endorsement of the linear collider - both nationally and internationally,
- But with as yet relatively little participation by universities,
- The UCLC was formed to help university groups engage in linear collider R&D
  - both accelerator and detector

# UCLC History

- January 2002 - Chicago Linear Collider meeting
  - Jim Alexander announces the formation of a consortium of university groups interested in linear collider R&D
  - The consortium would submit a joint proposal to the NSF
- Enthusiastic response lead to the creation of a mailing list of interested groups
- LCCOM - April 19 at Cornell (Linear Collider Consortium Organizational Meeting) to identify participants and areas of interest and to help newcomers identify specific projects (parallel LCRD meetings at FNAL and SLAC)

# UCLC History - continued

- LCCOM2 - June 30 at Santa Cruz
  - participants present preliminary R&D plans
  - create a schedule (driven by NSF proposal deadline)
  - Coordinate with LCRD and USLCSG a common timeline leading to this review
- August 1 - draft project descriptions are received
- August - Friendly joint review of all UCLC and LCRD proposals
  - ALCPG -> Detector proposals
  - Himel,Finley,Rogers panel -> machine proposals
- Refine and update UCLC project descriptions and then combine with LCRD EOI's to produce

A University Program of Accelerator and Detector Research for the Linear Collider

# UCLC Tallies

| | |
|---|---|
| Num. of Accelerator Projects | 14 |
| Num. of Detector Projects | 17 |
| Total Projects | 31 |
| Num. of Groups* | 37 |
| Num. of Institutions | 20 |

* Num of Groups = Projects x Institutions/project

# Proposed R&D

- 5 Categories
  - Luminosity, Energy and polarization (MDI) - 2
  - Vertexing - 2
  - Tracking - 6
  - Calorimetry - 5
  - Muon - 1

# UCLC Review process

- NSF will conduct its own review of UCLC proposal
- The proposal submitted to NSF is limited to 15 pages - so it cannot include the detail before you today and it will be reviewed as one
- UCLC will use the US LC SG Review as basis for adjusting project budgets
  - So that requests are closer to NSF targets
- UCLC will submit proposal to NSF mid October

# UCLC Budget Summary

Amounts are in thousands of dollars

| | FY03 | FY04 | FY05 | Total |
|---|---|---|---|---|
| Accelerator Requests | 639 | 1,122 | 1,053 | 2,813 |
| Detector Requests | 725 | 1,500 | 2,044 | 4,268 |
| Total Requests | 1,363 | 2,622 | 3,097 | 7,081 |
| Budget target | 1,000 | 2,000 | 3,000 | 6,000 |

# UCLC Organization

- Project manager - Gerry Dugan
- Research Coordinators -
  - Accelerator - Joe Rogers, Jesse Ernst
  - Machine detector interface - Dave Cinabro
  - Vertexing - Pat Skubic, Homer Neal
  - Tracking - Keith Riles
  - Calorimetry - Dhiman Chakraborty

# Summary

- The 43 detector projects that have been proposed represent an important contribution to the linear collider R&D
- The participation of 46 institutions in the UCLC and LCRD indicate a strong interest within the physics community in the success of the linear collider
- Opportunity to involve students in the development of detectors for the collider
- Develop pool of talent on which design, construction, commissioning and operation of the collider detectors will ultimately depend.