

December 17, 2008

## **University Linear Collider Detector R&D**

### **Proposal Process for FY 2009**

(Approximate grant dates: Sep 1, 2009-Aug 31, 2010)

The US university linear collider detector community is planning to submit proposals to the DOE and NSF to support the R&D programs of the integrated detectors represented in the Letters of Intent (LoI) being prepared for submission March 31, 2009. The process of submission is in two parts : 1.) preparation of detailed project descriptions, and 2.) submission of proposals by the LoI groups, each led by two PIs. While funding is uncertain, if it becomes available the total for all proposals could range from \$300k to \$2M. This range should be taken into consideration when preparing the project descriptions, and the LoI proposals. The agencies will make a partial award followed by the remaining award after the six month status report by the co-PIs.

#### **PROJECT DESCRIPTIONS**

The project descriptions will propose R&D in one of the following areas:

1. Luminosity, Energy, and Polarization measurements of the ILC beams at the interaction point
2. Vertex detector development
3. Tracking detectors, including solid state and gaseous devices
4. Calorimeters for measurement of energy of high energy neutral and charged particles, and particle jets
5. Muon detectors and particle ID detectors
6. Detector simulation
7. Pre-conceptual design for integrated detectors

Each description will explain how the proposed effort contributes to the detector R&D proposed by the LoI groups. Further guidance is contained in the document [http://physics.uoregon.edu/~lc/lcdrd/FY09\\_ProjDescriptions.pdf](http://physics.uoregon.edu/~lc/lcdrd/FY09_ProjDescriptions.pdf)

#### **PROPOSALS**

Each LoI group will submit a proposal to both agencies, proposing an R&D program based on the projects above. The proposal will describe the prioritization of the proposed projects, and refer to the specific, detailed project descriptions, which the LoI group proposes to include in its R&D program. The proposal will explain how the R&D

proposed is coordinated with the world-wide effort, and with the effort in the US laboratories, and provide prioritized plans at a few funding levels. Two PIs will be identified, one from the university community and one from the laboratories. The PIs will be responsible for monitoring progress on the projects, reporting to the agencies at least every six months on progress, and interacting with the agencies on related matters.

Further guidance on the proposals is contained in the document  
[http://physics.uoregon.edu/~lc/lcdrd/FY09\\_Proposal\\_Guide.pdf](http://physics.uoregon.edu/~lc/lcdrd/FY09_Proposal_Guide.pdf)

**The schedule for FY2009 proposals will be as follows:**

**January 23, 2009: Project submission deadline to LCSGA** (to J. Brau and G. Gollin, and LoI contacts)

Each project should include a technical project description of 6 to 15 pages in length. Projects which are continuing from prior years should provide a status report of prior research and a work plan for the next year, as well as the work plan for a second and third year, if appropriate.

Project descriptions and status reports should follow the specified format provided in the template. In addition to the technical project description, the budget plan and budget narrative must be included.

Requirements for submissions are posted on the internet at

<http://physics.uoregon.edu/~lc/lcdrd/FY09-process.html>

**February 18, 2009: Proposals submitted jointly to DOE and NSF by LoI groups.**

Proposals should provide a general description of the LoI detector. The overall R&D efforts world-wide, and in US laboratories should be described, explaining how the R&D proposed here relates and is coordinated with other efforts. Present the proposed R&D plan, based on the R&D projects descriptions submitted by R&D teams in January, at a few funding levels. Each of the LOI proposals will be led by two Principal Investigators, one from the university community and one from the laboratories.