## **Department of Energy**



Washington, DC 20585

APR 8 2011

Dr. William Boroski LQCD Contractor Project Manger Fermi National Accelerator Laboratory Mail Station: 127 (WH 7W) P.O. Box 500 Batavia, IL 60510-0500

Dear Dr. Boroski:

The Department of Energy (DOE) Office of High Energy Physics and the Office of Nuclear Physics plan to conduct an Annual Progress Review of the Lattice Quantum Chromodynamics (LQCD-ext) Computing Project on May 10-11, 2011, at the Fermi National Accelerator Laboratory (FNAL). A review panel of experts in high energy physics, nuclear physics, project management, and computer science is being convened for this task.

John Kogut of the Office of High Energy Physics is responsible for this review; he will be assisted by Helmut Marsiske of the Office of Nuclear Physics.

Each panel member will evaluate background material on the LQCD-ext project and attend all the presentations at the May 10-11 review. The focus of the 2011 LQCD-ext Annual Progress Review will be on understanding:

- The continued significance and relevance of the LQCD-ext project, with an emphasis on its impact on the experimental programs' support by the DOE Offices of High Energy Physics and Nuclear Physics;
- The progress toward scientific and technical milestones as presented in the project's IT Exhibit 300;
- The status of the technical design and proposed technical scope for FY 2011;
- The feasibility and completeness of the proposed budget and schedule;
- The effectiveness of the proposed management structure and responsiveness to any recommendations from last year's review.

In addition, we will also be using this review to assess the plans for, and progress on, the construction and operation of the Thomas Jefferson National Accelerator Facility LQCD cluster which is funded by the American Recovery and Reinvestment Act (ARRA) of



2009. We are consolidating these reviews because the LQCD ARRA cluster will be operated by the USQCD collaboration like any other hardware platform of the LQCD-ext project. However, since ARRA funding is subject to special scrutiny, it will receive a separate progress report. Chip Watson, the Contractor Project Manager for the LQCD ARRA cluster, should present the relevant information in the LQCD ARRA project documentation in order to allow the panel to evaluate the project according to the above charge elements.

Each panel member will be asked to review these aspects of the LQCD-ext and LQCD ARRA projects and write an individual report on his/her findings. These reports will be due at the DOE two weeks after completion of the review. John Kogut, the Federal Project Manager, will accumulate the reports and compose a final summary report based on the information in the letters.

The two days of the review will consist of presentations and executive sessions. The later half of the second day will include an executive session and preliminary report writing; a brief close-out will conclude the review. Preliminary findings, comments, and recommendations will be presented at the close-out. You should work with Chip Watson and John Kogut to generate an agenda which addresses the goals of the review.

Please designate a contact person at FNAL for the review panel members to contact regarding any logistics questions. Word processing, internet connection and secretarial assistance should be made available during the review. You should set up a web site for the review with relevant background information on LQCD-ext and LQCD ARRA, links to the various LQCD-ext and LQCD ARRA sites the collaboration has developed, and distribute relevant background and project materials to the panel at least two weeks prior to the review. Please coordinate these efforts with John Kogut so that the needs of the review panel are met.

We greatly appreciate your willingness to assist us in this review. We look forward to a very informative and stimulating review at FNAL.

Sincerely,

Michael Procario Acting Associate Director of Science for High Energy Physics

Timothy Hallman Associate Director Office of Nuclear Physics