



## Department of Energy

Washington, DC 20585

FEB 25 2013

Dr. William Boroski  
LQCD Contractor Project Manager  
Fermi National Accelerator Laboratory  
P.O. Box 500 MS-127 (WH 7W)  
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 9-10, 2013, at the Thomas Jefferson National Accelerator Facility (TJNAF). 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 and Ted Barnes 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 9-10 review. The focus of the 2013 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 2013;
- 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 status of the project at TJNAF to construct and operate LQCD clusters, which was funded under the



American Recovery and Reinvestment Act (ARRA) of 2009. This project was completed in 2012. The panel is asked to assess:

- The status of the LQCD-ARRA project in achieving project goals and performance specifications.

Because ARRA funding is subject to special scrutiny, the LQCD-ARRA project will receive a separate report. Chip Watson, the Contractor Project Manager should present the relevant documentation in order to allow the panel to perform the above assessment.

The LQCD-ARRA clusters are subject to the same governance as those of LQCD-ext. Consequently, those two efforts are now merged into one operation under your direction. Since LQCD-ext computer cycles are allocated by the USQCD collaboration, the panel members will also consider:

- The effectiveness of USQCD in allocating the LQCD-ext resources to its community of lattice theorists, the scientific impact of this research on the entire HEP and NP communities and the status, operational procedures and related activities of the USQCD collaboration itself.

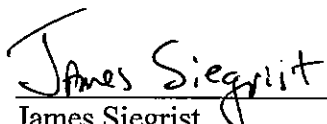
The two days of the review will consist of presentations and executive sessions. The later half of the second day will include an executive session and preliminary report writing; a brief close-out will conclude the review. Preliminary findings, comments, and recommendations will be presented at the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

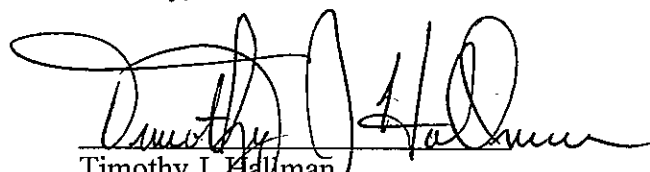
Each panel member will be asked to review those aspects of the LQCD-ext and LQCD-ARRA projects listed above which are within their scope of expertise and write an individual report on his/her findings. These reports will be due at the DOE two weeks after completion of the review. John Kogut, the Federal Project Manager, will accumulate the reports and compose a final summary report based on the information in the letters. That report will have recommendations for your consideration that you and USQCD should respond to in a timely fashion.

Please designate a contact person at TJNAF 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, links to the various LQCD-ext 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 TJNAF.

Sincerely,

  
James Siegrist  
Associate Director of Science  
for High Energy Physics

  
Timothy J. Hallman  
Associate Director of the Office of Science  
for Nuclear Physics