# Certification and Accreditation Documentation for Lattice QCD Research Program Extension III

Unique Project (Investment) Identifier: 019-20-01-21-02-1032-00

Operated at Brookhaven National Laboratory Fermi National Accelerator Laboratory

*for the* U.S. Department of Energy Office of Science and High Energy

Version 2

May 10, 2021

PREPARED BY: Josephine Fazio, FNAL

CONCURRENCE:

Welly BR

Date: <u>May 10, 2021</u>.

William N. Boroski LQCD Contractor Project Manager

# LQCD-ext III Certification and Accreditation Documentation Change Log

Version No.	<b>Description / Pages Affected</b>	Effective Date
0.0	Updated to reflect LQCD-ext III operations model.	June 18, 2019
0.1	Updated to reflect updated ATO	July 30, 2020
0.2	Updated to reflect BNL& FNAL updated ATO	May 10, 2021

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## 1. SCOPE AND PURPOSE

This document contains Certification and Accreditation (C&A) documentation for the Lattice QCD Research Program Extension III Research Program (hereafter LQCD).

Computing systems used for LQCD operations at Brookhaven National Laboratory (BNL) and Fermi National Accelerator Laboratory (FNAL) are managed as parts of the enclaves maintained at each of the Laboratories and are governed by the corresponding rules of the Laboratories.

As of this date, C&A status at sites are given below:

- <u>BNL</u>: BNL is operating under a Computer Security Authority to Operate (ATO) document issued by the U.S. Department of Energy. A copy of BNL's DOE ATO cover letter is included in a later section.
- <u>FNAL</u>: FNAL is operating under a Computer Security Authority to Operate (ATO) document issued by the U.S. Department of Energy. A copy of FNAL's DOE ATO cover letter is included in a later section.

### 2. DOE ATO COVER PAGE for Brookhaven National Laboratory



#### Department of Energy

Office of Science Brookhaven Site Office P.O. Box 5000 Upton, New York 11973

October 19, 2020

Mr. Ian Ballantyne Brookhaven Science Associates, LLC Brookhaven National Laboratory Upton, New York 11973

Dear Mr. Ballantyne:

#### SUBJECT: NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) NIST 800-53 PRIVACY PLAN APPROVAL

Letter from I. Ballantyne, BSA, to R. Gordon, SC-BHSO, Subject: NIST 800-53 Reference: Privacy Plan, dated September 29, 2020

The above referenced request seeks approval on Brookhaven National Laboratory (BNL) Privacy Program Plan. The Department of Energy (DOE) Brookhaven Site Office (BHSO) evaluated your request and finds the plan addresses the Safeguard and Security finding 20SEP19-SC-104-SSPS-CS.5-001 on the implementation of NIST 800-53 Revision 4 Organization Level Privacy Controls and Plan of Action and Milestone (POAM) BNL-2020-4557. In addition, the Authority to Operate (ATO) for the Unclassified Program is renewed for one year.

If you have any questions please contact Jonathan Loh, of my staff, at extension 5408.

Sincerely, Robert P.

Gordon

Digitally signed by Robert P. Gordon Date: 2020.10.19 16:22:56 -04'00'

Robert P. Gordon Site Manager

CC: F. Healy, SC-CSC J. Loh, SC-BHSO T. Schlagel, BSA

#### 3. DOE ATO COVER PAGE for Fermi National Accelerator Laboratory



Department of Energy Fermi Site Office Post Office Box 2000 Batavia, Illinois 60510

October 30, 2018

Dr. Liz Sexton-Kennedy Chief Information Officer Fermilab P.O. Box 500 Batavia, IL 60510

Dear Dr. Sexton-Kennedy:

SUBJECT: ADDENDUM TO ACCREDITATION OF FERMI NATIONAL ACCELERATOR LABORATORY COMPUTER SECURITY ENCLAVES AND MAJOR APPLICATIONS - AUTHORITY TO OPERATE

Reference: Letter, from M. Weis to R. Roser, dated March 20, 2014, Subject: Accreditation of Fermi National Accelerator Laboratory Computer Security Enclaves and Major Applications - Authority to Operate

This addendum to Fermi National Accelerator Laboratory's (Fermilab's) current Authority to Operate (ATO) grants permission to operate the HEPCloud production facility which extends batch running of grid jobs to include commercial cloud and high performance computing systems.

Based on the analysis of risk assessment documents for HEPCloud that have been presented, the Fermi Site Office Authorizing Official (AO) concurs with the stated evaluation that the HEPCloud facility includes sufficient security controls to mitigate risks down to the level of the existing Laboratory cyber risk envelope. As such, the AO accepts the associated risks and includes this facility under the existing ATO.

If you have any questions concerning this correspondence, please call Mark E. Bollinger, of my staff, at (630) 840-8130.

Sincerely,

Michael J. Weis Site Manager

CC:

- I. Gaines, Fermilab T. Meyer, Fermilab T. Stillman, ANL
- F. Healy, CH

# APPENDIX A: Acronyms

ATO	Authority to Operate
C&A	Certification and Accreditation
LQCD	Lattice Quantum Chromodynamics
POAM	Plan of Action and Milestones