

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 0

June 18, 2019

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CONCURRENCE:



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June 21, 2019

Date

**LQCD-ext III Certification and Accreditation Documentation
Change Log**

Version No.	Description / Pages Affected	Effective Date
0.0	Updated to reflect LQCD-ext III operations model.	June 18, 2019

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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:

- BNL: 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.
- FNAL: 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

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

NOV 20 2018

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

Dear Mr. Ballantyne:

SUBJECT: AUTHORITY TO OPERATE (ATO) EXTENSION REQUEST

- References:
1. Letter from I. Ballantyne, BSA to B. Gordon, SC-BHSO, Subject: Authority to Operate (ATO) Extension Request, dated November 25, 2018
 2. Letter from F. Crescenzo, SC- BHSO, to I. Ballantyne, BSA, Subject: Request to Renew Authority to Operate (ATO) for Brookhaven National Laboratory (BNL) Information Systems (I.S.), dated November 30, 2017

Brookhaven National Laboratory (BNL) is currently operating an on-going ATO on all Information Systems that are outlined in the referenced letter from F. Crescenzo (Reference 2), dated November 30, 2017. This ATO is set to expire on November 30, 2018. Your referenced letter (Reference 1) requests to extend the ATO for the Information Systems to May 31, 2019. Based on careful review of the revised Project Management Plan, your request to renew the ATO is granted for the information listed below.

<i>Low Information System</i>	<i>Moderate Information System</i>
<i>RHIC-ATLAS Computing Facility (RACF)</i>	<i>Protected Core</i>
<i>PHENIX</i>	<i>Perimeter</i>
<i>STAR Data Acquisition System (SDAS)</i>	<i>Shared Services</i>
<i>NSLS-II Accelerator Controls Network(NACN)</i>	<i>Network Infrastructure</i>
<i>C-AD Controls</i>	<i>Moderate Workstations</i>
<i>Chemistry</i>	<i>Energy Management Control System (EMCS)</i>
<i>NYCCS (New York Blue)</i>	
<i>Administrative Workstations</i>	
<i>Research Workstation</i>	
<i>Visitor Network</i>	
<i>Administrative Workstations</i>	
<i>Center for Functional Nanomaterials</i>	

The extension will allow sufficient time for Brookhaven Science Associates (BSA) to complete the transition to the latest NIST 800-53 standard and provide the Department of Energy (DOE) adequate time to review all documentation for recertification.

K. Lally

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JUN 30 2014

This ongoing ATO supersedes any prior ATO letter issued and will be renewed on an annual basis. The Laboratory should retain a copy of this letter with the security authorization package.

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



Sincerely,



Frank J. Crescenzo
Site Manager

cc: F. Healy, SC-ISC
R. Gordon, SC-BHSO
E. Landini, SC-BHSO
J. Loh, SC-BHSO

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
<p>Dr. Liz Sexton-Kennedy Chief Information Officer Fermilab P.O. Box 500 Batavia, IL 60510</p>	
<p>Dear Dr. Sexton-Kennedy:</p>	
<p>SUBJECT: ADDENDUM TO ACCREDITATION OF FERMI NATIONAL ACCELERATOR LABORATORY COMPUTER SECURITY ENCLAVES AND MAJOR APPLICATIONS - AUTHORITY TO OPERATE</p>	
<p>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</p>	
<p>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.</p>	
<p>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.</p>	
<p>If you have any questions concerning this correspondence, please call Mark E. Bollinger, of my staff, at (630) 840-8130.</p>	
<p>Sincerely,</p>	
 Michael J. Weis Site Manager	
<p>cc: I. Gaines, Fermilab T. Meyer, Fermilab T. Stillman, ANL F. Healy, CH</p>	

APPENDIX A: Acronyms

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