# INTERNATIONAL

# COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

FOR

# BASIC SCIENCE COOPERATION

(HEREINAFTER "ICRADA") NO. 2024SXXX

BY AND AMONG

JEFFERSON SCIENCE ASSOCIATES, LLC
UNDER ITS U.S. DEPARTMENT OF ENERGY CONTRACT
TO MANAGE AND OPERATE
THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY (JLAB)

(HEREINAFTER "LABORATORY")

AND

ISTITUTO NAZIONALE FISICA NUCLEARE (INFN)

(HEREINAFTER "PARTICIPANT")

LABORATORY AND PARTICIPANT COLLECTIVELY REFERRED TO

AS THE "PARTIES" AND SEPERATELY AS A "PARTY"

This ICRADA being entered into by the Parties in order to carry out the cooperative activities set forth in the attached Annexes.

#### ARTICLE I: DEFINITIONS

- A. "DOE" means the Department of Energy, an agency of the United States of America.
- B. "Facility" means the Laboratory's Facility to which materials or equipment are delivered or installed in accordance with the Project and a location in which cooperative activities as set forth in applicable Task Order are conducted.
- C. "Filing Party" means the Party filing patent application(s) on a Subject Invention in a jurisdiction the Inventing Party decides not to file a patent application.
- D. "Generated Information" means information produced in the performance of this ICRADA.
- E. "Government" means the government of the United States of America and the government of Participant's country and agencies of each.
- F. "Intellectual Property" means patents, copyrights, and other forms of comparable property rights protected by the laws of one of the Parties' countries.
- G. "Inventing party" means the Party employing or sponsoring the inventor(s) of a Subject Invention.
- H. "Project" means the cooperative activities set forth and further defined in the applicable Task Order attached hereto.
- I. "Proprietary Information" means information which is developed at private expense outside of this ICRADA, is marked as Proprietary Information, and embodies (1) trade secrets or (2) commercial or financial information which is considered privileged or confidential under the laws of one of the Parties' countries, i.e., the United States of America or Participant's country.
- J. "Subject Invention" means any invention of the Laboratory or Participant conceived or first actually reduced to practice in the performance of work under this ICRADA.
- K. "Unlimited Rights" means the right to use, disclose, reproduce, prepare derivative works, distribute copies to the public and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

## ARTICLE II: STATEMENT OF WORK, TERM, FUNDING AND COSTS

A. The Parties will define the objectives and scope of work for this ICRADA through a series of individual Project specific (and subproject specific) Task Orders that will each have a statement of work to be performed, a budget (including costs and payments), net benefits statement, and any additional or modified terms applicable to each Project. Each Task Order will be required to be executed by the Parties and approved by DOE. Once fully executed and approved, Task Orders will become legally binding parts of the ICRADA and will be added as Annexes (e.g. A-1, A-2, A-3 etc.).

# B. [RESERVED]

C. Notices: The names, postal addresses, telephone and email addresses for the Parties are provided in the attached Task Orders. Any communications required by this ICRADA, if given by postage or other verifiable means addressed to the Party to receive the communication, shall be deemed made as of the day of receipt of such communication by the Party, or on the date given if by email. Address changes

shall be made by written notice and shall be effective thereafter. All such communications, to be considered effective, shall include the number of this ICRADA.

D. The effective date of this ICRADA shall be [the latter date of (1)] the date on which it is signed by the last of the Parties [or (2) the date on which it is approved by DOE].

**Note**: the bracketed language can be removed with DOE Contracting Officer approval when local procedures are in place that require DOE approval of the final agreement prior to execution by the Parties.

- E. The term of this ICRADA shall be 60 months (5 years) from the effective date unless terminated in accordance with the terms set forth herein.
- F. Costs and Payments are specified in the executed and approved Task Orders attached hereto.

## ARTICLE III: FORMS OF COOPERATION

The forms of cooperation under this ICRADA may include:

- A. research and development;
- B. visits by scientists, engineers, and other experts to participate in assembly, commissioning activities, and to conduct research and development;
- C. exchange of scientific and technical information and personnel;
- D. seminars and other meetings;
- E. a contribution of equipment, instruments and/or materials to the Laboratory or the Facility;
- F. operation and maintenance of, and improvements to the Facility, and supporting research and development;
- G. other related activities; and
- H. other forms of cooperation as mutually agreed.

## ARTICLE IV: EQUIPMENT/PERSONAL PROPERTY

Participant may be permitted by Laboratory to furnish equipment, tooling, test apparatus, or materials necessary to assist in the performance of this ICRADA. Unless otherwise agreed by the parties such items shall remain the property of Participant unless they are integrated into the Facility and any equipment that becomes integrated into the Facility shall be the property of the government of the United States of America.

Unless the Parties otherwise agree, all such property furnished by Participant or equipment and test apparatus provided by Participant that is not integrated into the Facility or necessary for the operation of the Facility, will be removed by Participant within sixty (60) days of termination or expiration of this ICRADA or will be disposed of as directed by Participant at Participant's expense.

Participant acknowledges that any material supplied by Participant may be damaged, consumed, or lost. Materials (including residues and/or other contaminated material) remaining after performance of the work or analysis will be removed in their then condition by Participant at Participant's expense. Participant will return facilities and equipment utilized in their original condition except for normal wear and tear.

The Participant shall use its best efforts to ensure that all equipment it supplies to the Project shall conform to the safety standards in force at Laboratory's Facility at the time of delivery to the Laboratory.

Laboratory shall have no responsibility for Participant's s property in Laboratory's possession other than loss or damage caused by willful misconduct or gross negligence of Laboratory or its employees.

Unless otherwise agreed by the Parties, personal property produced or acquired during the course of this ICRADA shall be disposed of as directed by the owner at the owner's expense.

If the Parties anticipate that the Participant will provide substantial equipment or materials under a Project, the Parties will follow the approved standard property management plan developed for that Project by incorporating the plan into the applicable Task Order. Or, if a standard property management plan for a Project has not yet been developed, the Parties shall develop a suitable property management plan for the Project.

## ARTICLE V: DISCLAIMER

The Parties' respective Governments, Participant, and Laboratory make no express or implied warranty as to the conditions of the research or any intellectual property, generated information, or product made, or developed under this ICRADA, or the ownership, merchantability or fitness for a particular purpose of the research or resulting product. Neither the Parties' respective Governments, Participant, nor Laboratory shall be liable for special, consequential or incidental damages or comparable damages provided by the laws of the Participant's country.

## ARTICLE VI: LIABILITY

Unless otherwise agreed by the Parties, a Party shall not be responsible to the other Party for any indirect or consequential loss or similar damage such as, but not limited to, loss of profit, loss of revenue or loss of contracts, provided such damage was not caused by wilful act. The provisions of this ICRADA shall not be construed to amend or limit the Party's statutory liability.

In cases where the personnel of one Party works on the premises of the other Party, such personnel shall comply with the internal regulations and the technical instructions of the host Party.

## ARTICLE VII: ASSIGNMENT OF PERSONNEL

- A. Each Party may assign personnel to the other Party's facilities as part of this ICRADA to participate in, or observe the research or other activities to be performed, under this ICRADA. Such personnel assigned by the assigning Party shall not during the period of such assignments be considered employees of the receiving Party for any purpose.
- B. The receiving Party shall have the right to exercise routine administrative and technical supervisory control of the occupational activities of such personnel during the assignment period and shall have the right to approve the assignment of such personnel and/or to later request their removal by the assigning Party.
- C. Unless otherwise agreed to by the Parties, the assigning Party shall bear any and all costs and expenses with regard to its personnel assigned to the receiving Party's facilities under this ICRADA. The receiving Party shall bear facility costs of such assignments.
- D. The Parties shall use their best efforts to ensure that their personnel working under this ICRADA conform to the rules for conduct and safety in force at the facility where the work is being performed.

#### ARTICLE VIII: RIGHTS TO INTELLECTUAL PROPERTY

The Parties agree that a purpose of this ICRADA is to provide substantial benefit to the economies of the United States of America and Participant's country. Project specific plans for providing a net benefit are included in each Task Order attached hereto. In exchange for the benefits received under this ICRADA, the Parties agree to the following:

- A. While the Parties do not anticipate the creation of Intellectual Property under this ICRADA, the Parties shall take appropriate steps, in accordance with the national laws and regulations of their respective countries, with a view to realizing the following arrangement of Intellectual Property:
  - (1) Rights to Subject Inventions between the Parties
    - (a) Subject Inventions made solely by persons employed or sponsored by one Party shall be owned by that Party. Subject Inventions made jointly by persons employed or sponsored by both Parties shall be jointly owned by the Parties.
    - (b) Each Party grants each Government, and the other Party, a nonexclusive, transferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of that Government, or that Party, all of its Subject Inventions arising out of this ICRADA throughout the world, with a right to grant sublicenses to third parties.
    - (c) For each Subject Invention made in performance of or under this ICRADA, the Inventing Party shall disclose the Subject Invention promptly to the other Party together with any documentation and information necessary to enable the other Party to establish any rights to which it may be entitled.
    - (d) The Parties agree that the Inventing Party of any Subject Invention shall have the first opportunity to file for patent protection. If there is more than one Inventing Party, the Inventing Parties shall agree among themselves as to who will file patent applications on any joint Subject Invention.
    - (e) The Inventing Party shall reasonably cooperate and assist the Filing Party, at the Filing Party's expense, in executing a written assignment of the Subject Invention to the Filing Party and in otherwise perfecting the patent application, and the Filing Party shall have the right to control the prosecution of the patent application.

# (2) [RESERVED]

### (3) Facilities License

(a) In addition to the rights of the Parties with respect to inventions or discoveries conceived or first actually reduced to practice in the course of or under this ICRADA, the Participant agrees to and does hereby grant to the Laboratory an irrevocable, non-exclusive, paid up license in and to any inventions or discoveries regardless of when conceived or first actually reduced to practice or acquired by the Participant, which at any time through completion of this ICRADA, are owned or controlled by the Participant and are incorporated into the Facility as a result of this ICRADA to such an extent that the Facility is not restored to the condition existing prior to this ICRADA. The license defined by this paragraph allows the Laboratory (1) to practice

or to have practiced by or for the Laboratory at the Facility those inventions or discoveries, and (2) to transfer such license with the transfer of the Facility.

- (4) Rights in Intellectual Property Other Than Subject Inventions
  - (a) Except for Subject Inventions, all Parties have a right to use, reproduce, prepare derivative works, perform and display publicly, and distribute to other Parties, any Intellectual Property developed during, or originating from, this ICRADA for any use, including but not limited uses necessary to ensure successful design, construction, commissioning, operation, and upgrades of/to the Project and Facility, and permit others to do so same.

## (b) [RESERVED]

- B. Laboratory shall be bound by the U.S. Industrial Competitiveness provisions in accordance with its Prime Contract with respect to any licensing and assignments of Intellectual Property arising under this ICRADA.
- C. Given the collaborative and basic science nature of this ICRADA, Participant agrees that the non-exclusive disposition of intellectual property rights allocated in this ICRADA is equitable and will best enable the Parties to fulfill the activities outlined in the attached Task Orders. Therefore, while Participant acknowledges that it has an option to choose an exclusive license for a pre-negotiated field of use for reasonable compensation for any Subject Invention made in whole or in part by a Laboratory employee, the Participant is declining such an option.
- D. [OPTION] Background Intellectual Property
  - (1) Each Party may use the other Party's Background Intellectual Property identified in Annex N/A of this ICRADA solely in performance of research under the Statement of Work. This ICRADA does not grant to either Party any option, grant, or license commercialize, or otherwise use the other Party's Background Intellectual Property. Licensing of Background Intellectual Property, if agreed to by the Parties, shall be the subject of separate licensing agreements between the Parties.
  - (2) Each Party has used reasonable efforts to list all relevant Background Intellectual Property, but Background Intellectual Property may exist that is not identified. Neither Party shall be liable to the other Party because of failure to list Background Intellectual Property

# ARTICLE IX: RIGHTS IN DATA

# A. GENERATED INFORMATION

Each Party shall have Unlimited Rights in all Generated Information produced by or provided to the Parties under this ICRADA, except for information which is disclosed in a Subject Invention disclosure being considered for patent protection, or which is marked as being Proprietary Information.

### B. PROPRIETARY INFORMATION

Each Party agrees to not disclose Proprietary Information provided by the other Party to anyone other than the Parties to this ICRADA without the written approval of the providing Party, except to employees of the respective Governments that are required to protect the Proprietary Information.

#### C. CESSATION OF OBLIGATIONS REGARDING PROPRIETARY INFORMATION

The obligations relating to the disclosure or dissemination of Proprietary Information shall end if any such information becomes known without fault or if such information is developed independently by a Party's employees who had no access to the Proprietary Information.

## D. SHARING GENERATED DATA WITH OTHERS

The Parties also agree to share all Generated Information with each other and any other entity or party identified in the applicable Project.

#### E. FACILITIES DATA CLAUSE

The Laboratory shall have Unlimited Rights in any Proprietary Information which is incorporated into the Facility or equipment under this ICRADA to such extent that the Facility or equipment is not restored to the condition existing prior to such incorporation. The Participant will provide to the Laboratory information, if any, which is (1) essential to the performance of work by the Laboratory personnel or (2) necessary for the health and safety of such personnel in the performance of the work.

#### ARTICLE X: COMPLIANCE WITH EXPORT CONTROLS AND REGULATIONS

If goods and/or technology are transferred, the Parties shall comply with the export control laws and regulations of the United States of America and Participant's country. The Parties shall obtain export licenses for goods and/or technology to be transferred for cooperative activities conducted under this ICRADA when such export licenses are required by the export control laws and regulations of the United States of America or Participant's country. Each Party is responsible for its own compliance with such laws.

## ARTICLE XI: REPORTS AND ABSTRACTS

- A. The Parties agree to produce the following deliverables: an initial abstract suitable for public release; interim reports as reasonably requested; and a final report including a list of Subject Inventions.
- B. Use of the name of the other Party or its employees in any promotional activity, with reference to this ICRADA, requires written approval (responses to customer survey forms and solicitations for success stories are considered written approval) of the other Party.

# ARTICLE XII: HARDSHIP/FORCE MAJEURE

Neither Party will be liable for unforeseeable events beyond its reasonable control.

# ARTICLE XIII: DISPUTES

The Parties will attempt to resolve any disputes between them which may arise during the course of this ICRADA. In the event that a dispute cannot be resolved between the Parties and upon mutual agreements of their respective Governments, the dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the Parties otherwise agree in writing, the arbitration rules of UNCITRAL shall apply.

# ARTICLE XIV: ENTIRE ICRADA, MODIFICATIONS AND TERMINATION

This ICRADA with its Annexes represent the entire agreement between the Parties in performing the research and other activities described in this ICRADA will be effective as defined in Article II paragraph (D). Any agreement to materially change any terms or conditions of this ICRADA shall be valid only if the change is made in writing and executed by the Parties hereto.

ICRADA No. 2024Sxxx

This ICRADA may be terminated by either Party with ninety (90) days written notice to the other Party. Each Party will be responsible for its own costs as a result of this termination. *The confidentiality, use, and/or non-disclosure obligations of this ICRADA shall survive any termination of this ICRADA, as well as provisions of this ICRADA which would naturally survive termination or expiration of this ICRADA.* 

# ARTICLE XV: ACCESS TO JEFFERSON LAB

In accordance with the Jefferson Lab Guest Access policy, all participants in Jefferson Lab agreements requiring access to Jefferson Lab property must submit a complete access registration request prior to accessing any Jefferson Lab owned or leased spaces at least 7 days in advance of their planned on-site arrival date. Upon arrival at Jefferson Lab, participants shall provide valid government issued pictured identification for access to Jefferson Lab. In addition, non-U.S. citizens must provide United States Citizenship and Immigration Service (USCIS) documents for verification upon arrival. Any participant who arrives at the Lab without advanced registration and/or required documentation/identification will be denied access.

Participants with a valid requirement for recurring, on-site access under this agreement may be granted a Jefferson Lab badge in accordance with Jefferson Lab's policies.

The Jefferson Lab Facility Security Officer, in conjunction with the Principal Investigator, may resolve any questions of citizenship and employment.

IN WITNESS WHEREOF, the Parties have caused this ICRADA to be duly executed in their respective names by their duly authorized representatives.

FOR LABORATORY:	FOR PARTICIPANT:
Signature	Signature
Name:Stuart Henderson	Name:Antonio Zoccoli
Title:Laboratory Director	Title:President of the INFN
Date:	Date:

#### ANNEX A

Project Specific Task Order EIC Detector Key Components (HEREINAFTER "Project")

### January, 2024

#### PROJECT DESCRIPTION:

The Electron Ion Collider (EIC) is being constructed at BNL. The accelerator complex includes hadron and electron sources and injectors, a Rapid Cycling Synchrotron (RCS) to accelerate electrons for injection into the Electron Storage Ring (ESR) at collision energy, the Hadron Storage Ring (HSR) and strong hadron cooling utilizing an Energy Recovery Linac (ERL). Collisions will be observed by a large acceptance detector in tandem with multiple auxiliary detectors surrounding the interaction region. Central to the EIC detector is a large superconducting solenoid magnet.

This Task Order is subject to and governed by ICRADA No. 2024SXXX ("ICRADA") between the Parties and all the terms, conditions, definitions, and provisions of said ICRADA are hereby incorporated by reference. The Parties agree to perform their respective obligations related to this Project in accordance with the terms and conditions of this Task Order and other documents attached or incorporated by reference, which together constitute the entire Task Order. In the event of any conflict between the provisions of this Task Order and the provisions of the ICRADA, the ICRADA shall control.

This collaborative project between JLab and INFN involves the design, procurement, fabrication and testing of key components of various sub-systems for the EIC detector, including the forward-region dual Ring Imaging Cherenkov (dRICH) particle identification detector, the inner three layers of the Silicon Vertex Tracking (SVT) detector, and the forward-region GEM-muRwell tracking detector disks.

The value of the INFN contribution, in DOE accounting, is up to \$14M USD.

# STATEMENT OF WORK ("SOW")

The following activities are planned to accomplish the above goals during the period of this ICRADA:

## Jefferson Lab Tasks:

- Provide existing requirements and interfaces to INFN to guide the design of the INFN-led detectors.
- Plan and conduct preliminary and final design reviews, procurement readiness, manufacturing readiness, and transportation readiness reviews.
- Provide engineering and technical oversight for the collaborative development of the final design, fabrication, testing and quality assurance for the
  - a. Forward-region dual Ring-Imaging Cherenkov (dRICH) detector.
  - b. Inner three layers of the Silicon Vertex Tracker (SVT) detector.
  - c. Forward-region Gas Electron Multiplier GEM-muRwell disks.

Commented [PA1]: This has to be discussed with INFN management. We understand Rolf comment but if INFN contributes for 24 M\$ (8 M\$ in EU accounting) this should be recognised somewhere. How things are done for DUNE and other agreements between DoE and INFN? To be discussed at RRB...

**Commented [PA2R1]:** Following discussion at RRB see my answer in the accompanying mail

Commented [RE3R1]: The problem is that the ICRADA is not the document to recognize the INFN contribution. The number is used as a tally to estimate what of the total project cost as described in the project planning is not DOE costs. I did a fast check of the number per your mail but there were downs (some dRICH components are US/DOE assumed procurements) and some ups (the electronics), and it is still nearly the same number. Recall that we have some 25 different detectors in ePIC and the total project cost in US costing is ~\$300M. So \$14M is not unreasonable. I will have to check in more details more, but that takes time as one has to check line by libe in P6.

Commented [RE4]: Note that this is up to and not a commitment. We used the estimated P6 project costs for dRICH, SVT scope, and muRWell disks scope, and added a 40% contingency. It is understood that the INFN contributions may be much higher, at the level of \$24M, but we have to go by formal project cost as the DOE needs that number. If we split in a separate BNL and JLab ICRADA, the BNL number would become up to \$3M USD and the JLab number up to \$11M USD.

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#### ICRADA No. 2020S015

 Lead in collaboration with BNL and INFN the commissioning of the INFN-provided detectors on site at BNL.

#### INFN Tasks:

- Participate in the development of the final fabrication design and engineering packages for the dual Ring-Imaging Cherenkov particle identification detector.
- Participate in the development of the final fabrication design and engineering packages for the inner three layers of the Silicon Vertex Tracker.
- Participate in the development of the final fabrication design and engineering packages for the forward GEM-muRwell tracking detector disks.
- Prepare appropriate engineering, work planning, procedures and quality assurance packages for final design reviews and participate in those reviews.
- Produce and test agreed key components of the dual Ring-Imaging Cherenkov detector, the Silicon Vertex Tracker layers, and the forward GEM-muRwell tracking detectors.
- 6. Participate in commissioning of the detectors at BNL.
- 7. Other tasks as agreed upon with JLab.

## ARTICLE I: DEFINITIONS

The following definitions are added to Article I:

A. None

## ARTICLE II: STATEMENT OF WORK, TERM, FUNDING AND COSTS

The following terms are added to Article II:

- B. The purpose of this project specific Task Order is to provide the Parties with a legal framework for scientific and technical cooperation related to: the design, procurement, fabrication and testing of components of the ePIC detector for the EIC, including the forward-region particle identification Ring-Imaging Cherenkov (dRICH) detector, components of the silicon vertex tracker (SVT), and the forward disks of the GEM-based micro-pattern gaseous detector systems (GEM-muRwell).
- C. The Participant's estimated contribution for this Task Order is \$0M.

Unless otherwise agreed to by the Parties in the form of a written modification to this Task Order, each Party shall bear the cost of its participation, which shall be subject to the availability of funds.

# NET BENEFITS STATEMENT

ICRADA No. 2020S015

The following Net Benefits Statement (NBS) applies:

This project will benefit JLab by providing a complete forward-region particle identification Ring-Imaging Cherenkov (RICH) detector system, and components of the vertexing and tracking detector systems, for the EIC. This will reduce the cost for the EIC project and the burden on staff to oversee the production of these detector sub-systems. These detectors are similar to those recently designed and built by INFN for other projects, such as the RICH detector systems for the CLAS12 detector upgrade and the ALICE ITS2 and ITS3 silicon tracker. It should also be noted that the original concept of the GEM-muRwell detector originated with INFN.

For the DOE this in-kind contribution to detector sub-systems will reduce the EIC project cost, and benefit from the specific detector technical expertise that lies with the INFN groups.

FOR LABORATORY:	FOR PARTICIPANT:
Signature	Signature
Name:Stuart Henderson	Name:Antonio Zoccoli
Title:Laboratory Director	Title:President of the INFN
Date:	Date:

#### Annex B

#### **General Conditions**

## Environment, Safety & Health and Quality Requirements

- A. In performing work under this Agreement, INFN shall comply with all applicable federal, regional (regioni), provincial (province), and local (comuni) environment, safety, and health laws and regulations. INFN shall also perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. INFN shall exercise a degree of care commensurate with the work and the associated hazards. INFN ensures that management of environment, safety, and health functions and activities becomes an integral but visible part of INFN work planning and execution processes employed for this project.
- B. INFN is responsible for its subcontractors' compliance with the environment, safety, and health requirements of this Agreement.
- C. Applicable safety programs will be reviewed to determine if Project specific procedures and ES&H programs will be subject to review by JLab for conformance with Agreement requirements (i.e., identified hazards are addressed and adequate controls are in place to protect the public, the workers, and the environment).
- D. Site visits by JLab safety and health representative may occur to assess implementation of applicable safety and health regulations.
- E. All equipment (mechanical, electrical, electronics, structural, etc.) being designed, procured, or fabricated for use at JLab, by JLab employees or users or to be used at another Department of Energy facility (including BNL) must be designed, procured and fabricated in compliance with the policies, processes and other requirements summarized in Annex D.
- F. In performing work under this Agreement, work will be conducted using accepted INFN practices or procedures that demonstrate industry-accepted scientific, engineering, or administrative practices.
- G. Test methods and characteristics shall be planned, documented and the approaches and procedures recorded and evaluated. Characteristics to be tested and test methods shall be specified. The test results shall be documented and their conformance to acceptance criteria evaluated. Documentation shall be developed to ensure replication of the work.
- H. Software/code/firmware used or developed shall be verified to assure correctness of intended operation prior to use. Software/code/firmware will be developed/used in accordance with INFN procedures or processes. Software/code/firmware used to develop results will be identified in applicable project reports. Reports or work summaries for modeling software development shall include:
- · The software/code/firmware name and version
- State the required functionality and performance
- Reference to the applicable verification method used
- Name and version of supporting software (e.g., system software, system tools, libraries, etc.)
- · Other systems that the software may be integrated with.

# Annex C CRADA Final Report Template

CRADA #
Date of Report:
Author of Report:

Participant:

Tech Point of Contact: JLab Tech Point of Contact:

Name: Name: Phone: Phone: E-Mail: E-Mail:

Releasing Official information (if different from above):

Name:

CRADA Title:

CRADA Objective:

CRADA Statement of Work:

STI Product Type (patents, journal articles, books, technical reports, thesis):

As per DOE O 241.1B Chg 1, the below information is required:

CRADA Products

Data that Non-Federal Collaborator Indicated as Proprietary: (Identify Data and Date Submitted; if None, State 'None')

Data Marked Restricted Access Information:

(Identify Data and Date or Request; if None, State 'None')

Invention Disclosures Made:

(Who Invented, Title, When; if None, State 'None')

Patent Applications:

(Who, Inventors, Title, When, Registration Number; if None, State 'None')

Copyrights Filed:

(Who, Title of Work, Date Filed; if None, State 'None')

Trademarks:

(Who, Mark Filed, Date Filed; if None, State 'None')

Commented [PA5]: This section is obscure to me

Commented [RE6R5]: That's okay, this section is for us/DOE

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Licenses Granted: (Title, Date Signed; if None, State 'None')
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Medium (e.g., format and related technical requirements, textual, multimedia, audiovisual, and digital):

# CRADA Outcomes;

Describe the Results of the Collaboration:

Were Objectives Met? How?

What was Demonstrated, or Developed?

Will this Result in a Commercial Product by the Participant? If So, Describe.

What was the Value of the Collaboration to Your University and the Jefferson Lab?

If this CRADA is related to Software & Technology or datasets the following is also required:

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Description:
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(Identify Software & Technology or Datasets; if None, state "None")

Legal Notices and Disclaimers:

(Identify any legal notices or disclaimers; if None, state "None")

Hardware Requirements (e.g., operating system, compiler/version): (Identify hardware, operating system, compiler/version; if None, state "None")

Related Resources (e.g., relation to specific journal article or technical report, when applicable): (Who, Title of Work, Date Filed; if None, state "None")

Contributing Organizations:

(Who, Inventors, Title; if None, state "None")

Software or Data Contact:

(Identify Software or Data Contact; if None, state "None")

ICRADA No. 2020S015

# Annex D Compliance with Codes and Standards

All equipment shall be designed, fabricated and tested in accordance with the EIC Code of Record to ensure that it can be accepted for use in the EIC. Of particular importance is compliance with electrical and pressure vessel safety codes.