

### Agreement Number: NUA FRA-2017-0031

### Non-Proprietary User Agreement

No.

### BETWEEN

# Fermi Research Alliance, LLC (" CONTRACTOR") Operator of Fermi National Accelerator Laboratory (hereinafter "Laboratory") under U.S. Department of Energy Contract No.

### DE-AC02-07CH11359

AND Universidade Federal de Sao Carlos ("USER")

(Collectively, "the Parties")

The obligations of the above-identified DOE Contractor may be transferred to and shall apply to any successor in interest to said Contractor continuing the operation of the DOE Non-Proprietary User Facility involved in this User Agreement.

# ARTICLE I. FACILITIES AND SCOPE OF WORK

CONTRACTOR will make available to employees, consultants and representatives of USER (hereinafter called "Participants") certain Laboratory Non-Proprietary User facilities, which may include equipment, services, information and other material, with or without Laboratory scientist collaboration, for purposes as described in the Appendix which is attached to and made a part of this Agreement. Additional future Appendices referencing this Agreement may be submitted by USER for identifying facilities and purposes during the term of this Agreement (see Article II). Such additional Appendices (also referred to as experiment proposals)will be considered to be part of this Agreement upon acceptance by CONTRACTOR. Each accepted and approved experiment proposal shall set forth the Technical Scope of Work of a specific project, including deliverables, to be performed pursuant to this Agreement. The scope of work shall not be considered proprietary information and shall be publicly releasable.

### ARTICLE II. TERM OF THE AGREEMENT

The term of this Agreement shall be effective as of the date on which it is signed by the last of the Parties. Unless terminated in accordance with the terms herein, this Agreement shall have a term of five (5) years from the effective date. The agreement can be renewed for additional terms upon written consent of the parties.

### ARTICLE III: COST, BILLING AND PAYMENT OF EXPENSES

- A. Each Party will bear its own costs and expenses associated with this Agreement.
- **B.** USER will coordinate with the CONTRACTOR to prepare an estimated cost applicable for potential limited support services from CONTRACTOR as requested by USER, and set up a USER Account before beginning an accepted and approved experiment.
- C. CONTRACTOR will invoice USER at the Billing Address submitted by USER, and USER will pay each such invoice in accordance with the instructions set forth in the CONTRACTOR Policy and Procedure for USER Accounts.

Rev. 1

# ARTICLE IV: ADMISSION REQUIREMENTS

USERs and Participants are subject to the administrative and technical supervision and control of CONTRACTOR; and will comply with all applicable rules of CONTRACTOR and DOE with regard to admission to and use of the User facility, including safety, operating and health-physics procedures, environment protection, access to information, cyber-security, hours of work, and conduct. Participants shall execute any and all documents required by CONTRACTOR acknowledging and agreeing to comply with such applicable rules of CONTRACTOR. Participants will not be considered employees of CONTRACTOR for any purpose.

# ARTICLE V: PROPERTY AND MATERIALS\*\*\*

USER may be permitted by Contractor to furnish equipment, tooling, test apparatus, or materials necessary to assist in the performance of its experiment(s) at the USER facility. Such items shall remain the property of USER. Unless the Parties otherwise agree, all such property furnished by USER or equipment and test apparatus provided by USER will be removed by USER within sixty (60) days of termination or expiration of this Agreement or will be disposed of as directed by USER at User's expense. Any equipment that becomes integrated into the facility shall be the property of the Government. USER acknowledges that any material supplied by USER 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 USER at USER's expense. USER will return facilities and equipment utilized in their original condition except for normal wear and tear.

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

Personal property produced or acquired during the course of this Agreement shall be disposed of as directed by the owner at the owner's expense.

### ARTICLE VI: <u>SCHEDULING</u>\*\*\*

USER understands that CONTRACTOR will have sole responsibility and discretion for allocating and scheduling usage of the User Facilities and equipment needed for or involved under this Agreement.

# ARTICLE VII: INDEMNITY AND LIABILITY\*\*\*

- A. Personnel Relationships USER shall be responsible for the acts or omissions of Participants.
- **B. Product Liability** To the extent permitted by US and US State law, if USER utilizes the work derived from this Agreement in the making, using, or selling of a product, process or service, then USER hereby agrees to hold harmless and indemnify CONTRACTOR and the United States Government, their officers, agents and employees from any and all liability, claims, damages, costs and expenses, including attorney fees, for injury to or death of persons, or damage to or destruction of property, as a result of or arising out of such utilization of the work by or on behalf of USER, its assignees or licensees.
- C. General Indemnity To the extent permitted by US and US State law, USER hereby agrees to indemnify and hold harmless CONTRACTOR and the United States Government, their officers, agents and employees from any and all liability, claims, damages, costs and expenses, including attorney fees, for injury to or death of persons, or damage to or destruction of property, to the extent such liability, claims, or damages is caused by or contributed to the negligence or intentional misconduct of USER or its employees or representatives during the performance of the work under this Agreement.
- **D.** Patent and Copyright Indemnity—Limited To the extent permitted by US and US State law, USER shall fully indemnify the Government and CONTRACTOR and their officers, agents, and employees for infringement of any United States patent or copyright arising out of any acts required or directed or performed by USER under the Agreement to the extent such acts are not normally performed at the facility.
- **E.** The liability and indemnity provisions in paragraphs B, C and D above shall not apply unless USER shall have been informed as soon as practicable by CONTRACTOR or the Government of the suit or action alleging such infringement, and such indemnity shall not apply to a claimed infringement that is settled without the consent of USER unless required by a court of competent jurisdiction.

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### F. General Disclaimer -

THE GOVERNMENT AND CONTRACTOR MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITIONS OF THE USER FACILITY FURNISHED HEREUNDER. IN ADDITION, THE GOVERNMENT, CONTRACTOR AND USER MAKE NO EXPRESS OR IMPLIED WARRANTY AS TO THE RESEARCH OR ANY INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DEVELOPED UNDER THIS AGREEMENT, OR THE OWNERSHIP, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE RESEARCH OR RESULTING PRODUCT; THAT THE GOODS, SERVICES, MATERIALS, PRODUCTS, PROCESSES, INFORMATION, OR DATA TO BE FURNISHED HEREUNDER WILL ACCOMPLISH INTENDED RESULTS OR ARE SAFE FOR ANY PURPOSE INCLUDING THE INTENDED PURPOSE; OR THAT ANY OF THE ABOVE WILL NOT INTERFERE WITH PRIVATELY OWNED RIGHTS OF OTHERS. THE GOVERNMENT, CONTRACTOR AND/OR USER SHALL NOT BE LIABLE FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ATTRIBUTED TO USE OF SUCH FACILITIES, RESEARCH OR RESULTING PRODUCT, INTELLECTUAL PROPERTY, GENERATED INFORMATION, OR PRODUCT MADE OR DELIVERED UNDER THIS AGREEMENT.

### ARTICLE VIII: PATENT RIGHTS\*\*\*

### A. Definitions

- 1. "Subject Invention" means any invention or discovery conceived or first actually reduced to practice in the course of or under this Agreement.
- 2. "USER Invention" means any Subject Invention of USER.
- 3. "CONTRACTOR Invention" means any Subject Invention of CONTRACTOR.
- 4. "Patent Counsel" means the DOE Counsel for Intellectual Property assisting the DOE Contracting activity.

### **B.** Subject Inventions

CONTRACTOR and USER agree to disclose their Subject Inventions, which includes any inventions of their Participants, to each other, concurrent with reporting such Subject Inventions to DOE.

### C. CONTRACTOR's Rights

Except as provided below in the case of joint inventions, CONTRACTOR Inventions will be governed by the provisions of CONTRACTOR'S Prime Contract for operation of the User facility.

### D. USER's Rights

Subject to the provisions herein, USER may elect title to any USER Invention and in any resulting patent secured by USER within one year of reporting the subject invention to DOE. The USER shall file a US patent application within a reasonable period of time. Where appropriate, the filing of patent applications by USER is subject to DOE security regulations and requirements.

### E. Joint Inventions

For Subject Inventions conceived or first actually reduced to practice under this Agreement that are joint Subject Inventions made by CONTRACTOR and USER, each Party shall have the option to elect and retain title to its undivided rights in such joint Subject Inventions.

### F. Rights of Government

- 1. USER agrees to timely assign to the Government, if requested, the entire right, title, and interest in any country to each USER Invention where USER:
  - a. Does not elect to retain such rights; or
  - **b.** Fails to timely have a patent application filed in that country on the USER Invention or decides not to continue prosecution or not to pay the maintenance fees covering the Invention; or
  - c. At any time, no longer desires to retain title.

- 2. USER shall provide the Government a copy of any application filed by USER promptly after such application is filed, including its serial number and filing date.
- 3. USER hereby grants to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the USER Invention made under said project throughout the world.
- 4. USER acknowledges that the DOE has certain March-in Rights to any USER Inventions elected by the USER in accordance with 48 C.F.R. 27.304-1(g) and that the USER is subject to the requirements with respect to preference for U.S. industry pursuant to 35 U.S.C. § 204 to any USER Inventions elected by the USER.
  - 5. The USER agrees to include, within the specification of any U.S. patent applications and any patent issuing thereon covering a USER Invention, the following statement: "The Government has rights in this invention pursuant to a USER Agreement between Universidade Federal de Sao Carlos and Fermi Research Alliance, LLC, which manages and operates Fermi National Accelerator Laboratory under US DOE Contract No. DE-AC02-07CH11359."
- 6. USER agrees to submit on request periodic reports to DOE no more frequently than annually on the utilization of USER Inventions or on efforts to obtain such utilization that is being made by USER or its licensees or assignees.
- 7. Facilities License: USER agrees to and does hereby grant to the Government a nonexclusive, nontransferable, irrevocable, paid-up license in and to any inventions or discoveries, regardless of when conceived or actually reduced to practice or acquired by USER, which are incorporated in the User Facility as a result of this Agreement to such an extent that the facility is not restored to the condition existing prior to the Agreement (1) to practice or to have practiced by or for the Government at the facility, and (2) to transfer such licenses with the transfer of that facility. The acceptance or exercise by the Government of the aforesaid rights and license shall not prevent the Government at any time from contesting the enforceability, validity or scope of, or title to, any rights or patents herein licensed.

### G. Invention Report and Election

USER shall furnish the Patent Counsel a written report concerning each USER Invention within six months after conception or first actual reduction to practice, whichever occurs first. If USER wishes to elect title to the Invention, a notice of election should be submitted with the report or within one year of such date of reporting.

# ARTICLE IX: RIGHTS IN TECHNICAL DATA\*\*\*

### A. Definitions:

- 1. "Technical Data" means recorded information regardless of form or characteristic, of a scientific or technical nature. Technical Data as used herein does not include financial reports, costs analyses, and other information incidental to Agreement administration.
- 2. "Unlimited Rights" means right to use, duplicate, or disclose Technical Data, in whole or in part, in any manner and for any purpose whatsoever, and to permit others to do so.

## B. Allocation of Rights

- 1. The Government shall have Unlimited Rights in Technical Data first produced or specifically used in the performance of this Agreement except as otherwise provided in this Agreement.
- 2. USER shall have the right to use for its private purposes, subject to patent, security or other provisions of this Agreement, Technical Data it first produces in the performance of this Agreement provided the data delivery requirements of this Agreement have been met as of the date of the private use of such data; and Technical Data first produced by CONTRACTOR, if any, under this Agreement. USER agrees that to the extent it receives or is given access to technical, business or financial data in the form of recorded information from DOE or a DOE contractor or subcontractor, USER shall treat such data in accordance with any restrictive legend contained thereon, unless use is specifically authorized by prior written approval of the Contracting Officer.

# C. Deliverables

- USER agrees to furnish to DOE or CONTRACTOR those data, if any, which are (a) specified to be delivered in Appendices, (b) essential to the performance of work by CONTRACTOR personnel or (c) necessary for the health and safety of such personnel in the performance of the work. Any data furnished to DOE or CONTRACTOR shall be deemed to have been delivered with unlimited rights.
- 2. Upon completion or termination of the project, USER agrees to deliver to DOE and CONTRACTOR a nonproprietary report describing the work performed under this Agreement.

### D. Legal Notice

The following legal notice shall be affixed to each report or publication resulting from this Agreement which may be distributed by USER:

### DISCLAIMER NOTICE

This document was prepared by Universidade Federal de Sao Carlos as a result of the use of facilities of the U.S. Department of Energy (DOE), which are managed by Fermi Research Alliance, LLC (FRA), acting under Contract No. DE-AC02-07CH11359. Neither FRA, DOE, the U.S. Government, nor any person acting on their behalf: (a) make any warranty or representation, express or implied, with respect to the information contained in this document; or (b) assume any liabilities with respect to the use of, or damages resulting from the use of any information contained in the document.

### E. Copyrighted Material

- 1. USER agrees to, and does hereby grant to the Government, and to its officers, agents, servants and employees acting within the scope of their duties:
  - a. A royalty-free, nonexclusive, irrevocable license to reproduce, translate, publish, use, and dispose of and to authorize others so to do, all copyrightable material first produced or composed in the performance of this Agreement by USER, its employees or any individual or concern specifically employed or assigned to originate and prepare such material; and
  - b. A license as aforesaid under any and all copyrighted or copyrightable works not first produced or composed by USER in the performance of this Agreement but which are incorporated in the material furnished or delivered under the Agreement, provided that such license shall be only to the extent USER now has, or prior to completion or final settlement of the Agreement may acquire, the right to grant such license without becoming liable to pay compensation to others solely because of such grant.
- 2. USER agrees that it will not knowingly include any copyrightable material furnished or delivered under this Agreement without a license as provided for in subparagraph I (b) hereof, or without the consent of the copyright owner, unless it obtains specific written approval of the Contracting Officer for the inclusion of such copyrighted materials.

### F. Disclosure of Proprietary Data

The USER shall not bring Proprietary Data into the USER facility except at USER's own risk. Any such data, regardless how it is marked, shall be deemed Technical Data and shall be treated according to this article of this Agreement.

# ARTICLE X. LABORATORY SITE ACCESS. SAFETY AND HEALTH\*\*\*

As a precondition to using CONTRACTOR facilities, Participants must complete all CONTRACTOR Site Access documents and requirements. USER and participant shall take all reasonable precautions in activities carried out under this Agreement to protect the safety and health of others and to protect the environment. Participants must comply with all applicable safety, health, access to information, security and environmental regulations and the requirements of the Department and CONTRACTOR, including the specific requirements of the User Facility covered by this Agreement. In the event that USER or Participant fails to comply with said regulations and requirements, CONTRACTOR may, without prejudice to any other legal or contractual rights, issue and order stopping all or any part of USER's activities at the User Facility.

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# ARTICLE XI. PERSONNEL RELATIONSHIPS\*\*\*

Participants will remain employees or representatives of the USER at all times during their participation in the work under this Agreement, and shall not be considered employees of CONTRACTOR or DOE for any purpose. Participants shall be subject to the administrative and technical supervision and control of CONTRACTOR during and in connection with the Participant's activities under this Agreement.

# ARTICLE XII: <u>EXPORT CONTROLS</u>\*\*\*

USER acknowledges that the export of goods or Technical Data may require some form of export control license from the U.S. Government and that failure to obtain such export control license may result in criminal liability under the laws of the United States.

# ARTICLE XIII: <u>PUBLICATIONS</u>\*\*\*

- A. USER and CONTRACTOR will provide each other copies of articles of any publication of information generated pursuant to this Agreement for review and comment 14 days prior to publication.
- **B.** USER will not use the name of CONTRACTOR or the United States Government or their employees in any promotional activity, such as advertisements, with reference to any product or service resulting from this Agreement, without prior written approval of the Government and CONTRACTOR.

### ARTICLE XIV: DISPUTES \*\*\*

The parties will attempt to jointly resolve all disputes arising under this agreement. If the parties are unable to jointly resolve a dispute within a reasonable period of time, either party may contact the laboratory's Technology Transfer Ombudsman (TTO) to provide assistance. The TTO may work directly to resolve the dispute or, upon mutual agreement of the parties, contact a third party neutral mediator to assist the parties in coming to a resolution. The costs of the mediator's services will be shared equally by the parties. In the event that an agreement is not reached with the aid of the ombudsman or mediator, the parties may agree to have the dispute addressed by neutral evaluation. The decision rendered by the neutral evaluator shall be nonbinding on the parties, and any costs incurred there from shall be divided equally between the parties. Upon mutual agreement, the parties may request a final decision by the DOE Contracting Officer. Absent resolution, either party may seek relief in a court of competent jurisdiction.

# ARTICLE XV. CONFLICT OF TERMS\*\*\*

This Agreement constitutes the primary document that governs the work described in the attached Appendices. In the event of any conflict between the terms of this document and any other document issued by either Party, including any purchase orders or other financial instruments related to this Agreement and its Appendices, the terms of this document shall prevail, except as follows:

- A. If research subject to this Agreement is performed by the USER under a federal agency grant, cooperative agreement, or contract, then, to the extent that the Intellectual Property Provisions in the USER's grant, cooperative agreement, or contract with a federal agency are inconsistent with the terms and conditions contained in these Articles, the terms and conditions of the grant, cooperative agreement, or contract shall apply to the work performed by the USER under this Agreement.
- **B.** If USER is a U.S. Government Agency, rights in and to patents and copyrights of USER shall be governed by the policies and regulations pertaining to USER and its employees.

# ARTICLE XVI: <u>TERMINATION</u>\*\*\*

Either Party may terminate this Agreement for any reason at any time by giving not less than thirty (30) days prior written notice to the other Party. Notice will be deemed made as of the day of receipt. The obligations of any clause of this Agreement, which by their nature extend beyond its termination, shall remain in full force and effect until fulfilled.



# FOR CONTRACTOR:

SIGNATURE:

BY:

Chemi & Schmint Cherri J. Schmidt

(Name of authorized officer, typed or printed)

TITLE:

DATE:

Mac, Office of Pertnerships & Tech Transfer 16 MAY 2019

FOR USER:

SIGNATURE: BY:

TITLE: DATE:

Wande Ho PROF. WANDA AFARE EIDA MACHADO HOFFMANN, PH. D. (Name of authorized officer, typed or printed) RECTOR

APRIL 15, 2019

# Appendix –List of Participants and Experiments from Universidade Federal de Sao Carlos

# As of 31 October 2017

This list includes all participants from the User Institution who have been approved to work onsite at Fermilab (a badge has been issued and is active) or have been approved for offsite access to Fermilab computing services (computing account is active) as of 31 October 2017. Additional participants and experiments may be added to the NPUA at any time, and participants may change status between onsite or offsite access, upon request of the User Institution and with the approval of the Contractor.

Participant	Experiment	Onsite or Offsite
Franciole Marinho (304731)[C]	SBND: Short-Baseline Near Detector #P1053	Off-site

The main purpose of the User Institution by joining the Fermilab neutrino program is to contribute to the ongoing scientific development of the future experiments planned to start along the next years (SBND and DUNE). The aim is to strengthen the User Institution's current collaborations with Fermilab scientists, other international teams and the Brazilian groups already involved in an articulated way. In particular, initial efforts will be directed towards scintillation light studies span from understanding the effects of the micro-physics occurring due to the passage of charged particles through matter, light propagation in the cryostat medium, up to characterizing and improving data analysis of the employed detection techniques. As of the signature date of this User Agreement, relevant results in these directions have already been produced and published and shall continue. Closer to the commissioning phases of the detectors, the User Institution's group also intends to engage on neutrino physics analyses of experimental data that might be related on subjects such as neutrino-argon interactions in the GeV range, searches for neutrino oscillations, nucleon decays and supernova-neutrino physics. These studies are of great scientific relevance in particle physics and should provide valuable means to tackle fundamental questions related to the nature of the most basic constituent particles of the matter and their interactions. Contribution to those challenging endeavors can only be made throughout access and analysis of data obtained with experiments such as SBND and DUNE hosted by Fermilab.

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