

**MEMORANDUM OF UNDERSTANDING**  
**between**  
**INSTITUTE OF HIGH ENERGY PHYSICS**  
**and**  
**UCHICAGO ARGONNE, LLC,**  
**OPERATOR OF ARGONNE NATIONAL LABORATORY**  
**FOR COOPERATION CONCERNING HIGH ENERGY PHYSICS (HEP) AND**  
**BASIC ENERGY SCIENCES (BES)**

The Institute of High Energy Physics (IHEP), an independent research institution under the Chinese Academy of Sciences, and UChicago Argonne, LLC, operator of Argonne National Laboratory (Argonne) under Prime Contract No. DE-AC02-06CH11357 with the U.S. Department of Energy, IHEP and Argonne being referred to herein collectively as the "Participants",

SHARING an interest in collaborating in high energy physics and basic energy sciences also referred to as photon sciences,

HAVE REACHED THE FOLLOWING UNDERSTANDING:

**I. OBJECTIVE**

The Participants intend to work together to develop a framework for cooperation to promote collaborative efforts for basic research programs in areas of common interest. This cooperation may include exchange of experiences and results of theoretical, experimental, and development projects.

**II. FORMS OF COOPERATION**

The Participants intend to encourage and promote cooperation in common fields of interest concerning research and development in the field of High Energy Physics (HEP) and Basic Energy Sciences (BES), including but not limited to the areas described below.

High Energy Physics:

- Technologies for detector and accelerator technologies in high energy physics.

Basic Energy Sciences:

- Neutron sources and instrumentation, methods and applications of the neutron scattering technology: The China Spallation Neutron Source project consists of an accelerator complex, a target system and spectrometers and is being designed by IHEP.

- Synchrotron Radiation Technologies and Application: The Beijing Synchrotron Radiation Facility is one of the divisions of IHEP, and a new high energy synchrotron source is planning to be designed and constructed by IHEP. The Advanced Photon Source is located at Argonne.

Other cooperation area may be added by mutual decision of the Participants.

The forms of cooperation under this MOU may include the following:

- Exchange of information that the Participants have a right to disclose on an unrestricted and non-proprietary basis;
- Participation of experts in planning research and development, testing and design activities performed at the facilities of the Participants in the course of their respective research programs, e.g., as visiting postdoctoral fellows or comparable; and
- Organization of graduate programs, technical meetings, symposia or training courses.

Each Participant is to abide by the health, safety, and environmental requirements of the host Participant when on an exchange assignment at the host Participant's facility.

### III. POINTS OF CONTACT

Each Participant should designate one or more Lead Coordinators, to serve as its principal representative(s) for all activities conducted under this Memorandum of Understanding (MOU), including identifying areas of cooperation, coordinating cooperation between the Participants, and identifying available resources (including funding) for potential collaborative activities under this MOU. The Participants should endeavor to meet once per year to review the collaboration for the following year.

### IV. GENERAL CONSIDERATIONS

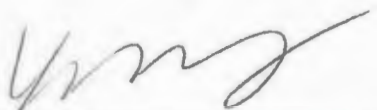
1. This MOU does not create any legally binding obligations between the Participants.
2. The conduct of cooperative activities contemplated by this MOU is subject to the availability of funding, personnel, and other resources.
3. Each Participant should conduct the cooperation under this MOU in accordance with applicable laws and regulations to which it is subject, and international agreements to which its Government is party.
4. Each Participant is responsible for the costs it incurs in participating in cooperative activities under this MOU.

V. COMMENCEMENT, MODIFICATION AND DISCONTINUATION

1. Cooperative activities under this MOU may commence upon signature by the Participants and continue for a 5-year period unless discontinued in accordance with paragraph 2 of this Section.
2. The Participants may discontinue this MOU at any time in writing. A Participant that wishes to discontinue its participation in this MOU should endeavor to provide at least ninety (90) days written notice to the other Participant.
3. This MOU may be modified in writing by mutual consent of the Participants, and may be extended for additional periods.

Signed in duplicate.

For Institute of High Energy Physics:



Yifang Wang, Director

20 June 2013

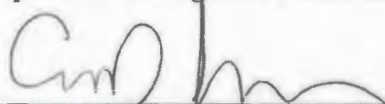
Date

Beijing

Place

For UChicago Argonne, LLC

Operator of Argonne National Laboratory:



Eric Isaacs, Director

30 April 2013

Date

Argonne National Laboratory

Place