IMPLEMENTING ARRANGEMENT BETWEEN THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA AND

THE MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY OF THE REPUBLIC OF KOREA FOR COOPERATION IN THE AREA OF HIGH-ENERGY AND NUCLEAR PHYSICS RESEARCH AND RELATED FIELDS

The Department of Energy of the United States of America and the Ministry of Education, Science and Technology of the Republic of Korea (hereinafter referred to as the "Parties" and each, a "Party"):

Noting their shared view, as confirmed at the Seventh Joint Committee Meeting for Science and Technology, held on June 14-15, 2010, that large research facilities, such as accelerators, contribute significantly to the advancement of science and technology;

Acting pursuant to Article II of the Agreement Relating to Scientific and Technical Cooperation between the Government of the United States of America and the Government of the Republic of Korea, signed on July 2, 1999 (hereinafter referred to as the "S&T Agreement");

Noting the necessity of mutually beneficial cooperation and exchanges of human resources, information and technology in the area of high-energy and nuclear physics research; and

Desiring to conduct substantive cooperation in the area of high-energy and nuclear physics research in order to fulfill both Parties' needs in new basic science research, and also to encourage cooperation mutually beneficial to both Parties in science and technology,

Have agreed as follows:

Section 1 OBJECTIVE AND SCOPE

- The objective of this Implementing Arrangement is to establish the framework for the promotion of scientific and technological cooperation between the Parties in high-energy and nuclear physics research and related fields, thereby enhancing the Parties' capabilities to make positive contributions in these fields for their mutual benefit.
- 2. This Implementing Arrangement is subject to and governed by the S&T Agreement. In the event of any conflict between the provisions of the S&T Agreement and the provisions of this Implementing Arrangement, the provisions of the S&T Agreement shall control.

Section 2 FORMS OF COOPERATION

Forms of cooperation under this Implementing Arrangement may include: joint or cooperative research projects and programs; the exchange of technical information and data; the exchange of technical and managerial personnel through visits and/or for short-term assignments; the exchange of equipment, materials and instrumentation; joint conferences, seminars or workshops; and such other forms of cooperation as the Parties may agree to in writing.

Section 3 PROJECT ANNEXES

- 1. Cooperative activities under this Implementing Arrangement may be undertaken by the Parties or, as appropriate, by relevant laboratories or contractors of the Parties. Each cooperative activity that may involve the sharing of costs or give rise to the creation of intellectual property shall be set forth in writing in a Project Annex, which shall be subject to and refer to the provisions of this Implementing Arrangement.
- Each Project Annex shall include detailed provisions for carrying out the specific forms of cooperation, including such matters as technical scope, exchange of business-confidential information, intellectual property rights, management, total costs, cost sharing and schedule.

Section 4 MANAGEMENT

 Each Party shall designate a Principal Coordinator to supervise activities under this Implementing Arrangement. The Principal Coordinators shall jointly plan and coordinate cooperative activities, co-chair joint meetings and prepare an annual Program of Cooperation. Each Principal Coordinator may appoint a Technical Coordinator for each cooperative activity.

- 2. The Principal Coordinators shall meet on an annual basis, or as otherwise mutually agreed upon, alternately in the United States and in the Republic of Korea, in other locations or by teleconference or videoconference as mutually agreed upon. The host Party shall choose the meeting site and bear the costs for the arrangements associated with the meeting. Representatives from each Party attending the meetings shall be responsible for their own travel and lodging expenses. At these meetings, the Principal Coordinators shall review and assess the progress of activities and the following year's plans for continuation of cooperation under this Implementing Arrangement.
- 3. The Principal Coordinators shall jointly prepare a written report of each meeting. Each Party shall have the right to disseminate the written meeting report without prior notification to the other Party after the record has been approved for release by both Parties.
- 4. The Principal Coordinators may invite representatives of other organizations of their countries to attend meetings and to serve as advisors to assist in planning the annual meetings and evaluating the progress of cooperative activities under this Implementing Arrangement.

Section 5 ADDITIONAL ORGANIZATIONS

Each Party may invite additional organizations of its country to participate in cooperative activities under this Implementing Arrangement, at the relevant organization's own expense and subject to such other terms and conditions as the Parties by agreement may specify. Such organizations in the United States may include, but are not limited to: Fermi National Accelerator Laboratory, Argonne National Laboratory, Brookhaven National Laboratory, Oak Ridge National Laboratory, Thomas Jefferson National Laboratory, Lawrence Berkeley National Laboratory, Los Alamos National Laboratory, Michigan State University, and Cornell University. Such organizations in the Republic of Korea may include, but are not limited to: Korea Atomic Energy Research Institute, Korea Basic Science Institute, Korea Institute of Geoscience and Mineral Resources, Korea Research Institute of Standards and Science, Korea Accelerator and Plasma Research Association, Seoul National University, POSTECH, Pohang Accelerator Laboratory, Sungkyunkwan University, Hanyang University, and Kyungpook National University.

Section 6 EXCHANGE OF PERSONNEL

Unless otherwise agreed in writing, the following provisions shall apply to the assignment or exchange of personnel under this Implementing Arrangement:

1. Each Party shall use its best efforts to ensure the selection of qualified personnel with the skills and competence necessary to conduct the activities planned under this Implementing Arrangement;

- 2. Each Party shall be responsible for the salaries, insurance, and allowances to be paid to its staff or its contractors;
- 3. Each Party shall pay for the travel and living expenses of its staff or its contractors when staying at an establishment of the other Party;
- 4. The Parties shall arrange for adequate accommodations for each other's staff and contractors (and their families) on a mutually agreeable, reciprocal basis;
- 5. Each Party shall provide all necessary assistance to the staff of the other Party and its contractors in regards to administrative formalities; and
- 6. The staff of both Parties and their contractors shall comply with the general rules of work and safety regulations in force at the host establishments.

Section 7 EXCHANGE OF EQUIPMENT

By mutual agreement, a Party may provide equipment to be utilized in a joint activity. In such event, the following provisions shall apply:

- 1. The Party providing the equipment (hereinafter referred to as the "Providing Party") shall supply, as early as possible, a detailed list of the equipment to be provided, together with the relevant specifications and appropriate technical and informational documentation related to use, maintenance, and repair of the equipment;
- Title to the equipment and necessary spare parts supplied by the Providing Party for use in joint activities shall remain with the Providing Party, and the equipment shall be returned to the Providing Party upon completion of the joint activity, unless otherwise agreed;
- 3. Equipment provided pursuant to this Implementing Arrangement shall be brought into operation at the host establishment only with the agreement of the Parties;
- 4. The host establishment shall provide the necessary premises and shelter for the equipment, utilities such as electric power, water and gas; and normally, shall provide materials to be tested, in accordance with all technical requirements, which shall be as mutually agreed upon;
- 5. Responsibility for expenses, safekeeping, and insurance during the transport of equipment from the original location in the country of the Providing Party to the place of entry in the country of the Party receiving such equipment (hereinafter referred to as the "Receiving Party") shall rest with the Providing Party. If the Providing Party elects to have the equipment returned, it shall be responsible for expenses, safekeeping, and insurance during the transport of the equipment from the original point of entry in the country of the Receiving Party to the final destination in the country of the Providing Party;

- 6. Responsibility for expenses, safekeeping, and insurance during the transport of equipment from the place of entry in the country of the Receiving Party to the final destination in the country of the Receiving Party shall rest with the Receiving Party. If the Providing Party elects to have the equipment returned, the Receiving Party shall be responsible for expenses, safekeeping, and insurance during the transport of the equipment from the final destination in the country of the Receiving Party to the original point of entry in the country of the Receiving Party; and
- 7. Responsibility for expenses, safekeeping, and insurance during the time period that the equipment is in use in the country of the Receiving Party shall rest with the Receiving Party, unless otherwise agreed in writing.

Section 8 EXCHANGE OF INFORMATION

- Information transmitted by one Party to the other Party under this Implementing Arrangement shall be appropriate and accurate to the best knowledge and belief of the transmitting Party, but the transmitting Party does not warrant the suitability or accuracy of the information transmitted for any particular use or application by the receiving Party or any third party.
- 2. Information developed jointly by the Parties shall be appropriate and accurate to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly developed information, nor its suitability for any particular use or application by either Party or any third party.

Section 9 INTELLECTUAL PROPERTY RIGHTS AND BUSINESS-CONFIDENTIAL INFORMATION

- 1.Scientific and technological information (other than business-confidential information) resulting from cooperation under this Implementing Arrangement shall be made available to the international scientific research community, unless otherwise agreed in writing by the Parties.
- 2.The protection and allocation of intellectual property and the treatment of business-confidential information shall be governed by Annex I to the S&T Agreement.

Section 10 GENERAL PROVISIONS

- 1. Each Party shall conduct the activities carried out under this Implementing Arrangement in accordance with the laws and regulations to which it is subject, and subject to the availability of personnel, appropriated funds, and other resources.
- 2. Unless otherwise agreed in writing, all costs resulting from collaboration under this Implementing Arrangement shall be the responsibility of the Party that incurs such costs.

- 3. Any questions of interpretation or implementation relating to this Implementing Arrangement arising during its term shall be resolved by consultations between the Parties.
- 4. All activities conducted under this Implementing Arrangement shall be exclusively for peaceful purposes.

Section 11 ENTRY INTO FORCE, AMENDMENT, AND TERMINATION

- 1. This Implementing Arrangement shall enter into force upon execution by the Parties and remain in force so long as the S&T Agreement remains in force, unless terminated earlier pursuant to paragraph 3 of this Section.
- 2. This Implementing Arrangement may be amended at any time by written agreement of the Parties.
- 3. This Implementing Arrangement may be terminated at any time by written agreement of the Parties. Alternatively, this Implementing Arrangement may be terminated at any time at the discretion of either Party upon six (6) months' written notice to the other Party.
- 4.All ongoing joint activities, projects and experiments not completed at the expiration or termination of this Implementing Arrangement may be continued until their completion under the provisions of this Implementing Arrangement.

DONE at Washington, in duplicate, this 12th day of May 2011, in the English and Korean languages, both texts being equally authentic.

FOR THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA:

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FOR THE MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY OF THE REPUBLIC OF KOREA:

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