

ICA-JP-0103

Agreement on Collaborative Work

between

**The European Organization for Nuclear Research
CERN CH-1211 Genève 23
Switzerland
(in the following called "CERN")**

and

**The High Energy Accelerator Research Organization
1-1 Oho, Tsukuba-shi, Ibaraki-ken 305-0801
Japan
(in the following called "KEK")**

2008

The European Organization for Nuclear Research ("CERN"), an intergovernmental Organization having its seat at 1211 Geneva 23, Switzerland, represented by Dr. Robert Aymar, Director-General,

On the one hand,

and

The High Energy Accelerator Research Organization ("KEK"), established at 1-1 Oho, Tsukuba-shi, Ibaraki-ken 305-0801, Japan, represented by Dr. Atsuto Suzuki, Director-General,

On the other hand,

Preamble

KEK and CERN (in the following jointly called "'Parties'" and separately "Party") share educational, scientific and technological goals, which provide a good foundation upon which to build a mutually beneficial scientific collaboration. KEK is responsible for promoting the activities of Japanese universities in high-energy physics research as Inter-University Research Institute Corporation, and CERN represents the European high-energy physics community. Therefore the Parties hereby conclude this Collaboration Agreement.

Article 1 Scope

- 1.1 This Collaboration Agreement ("the Agreement") constitutes the general legal framework for collaboration between the Parties.
- 1.2 The Parties shall collaborate in any of the following areas of activities:
 - Experimental particle physics, including both collider and fixed-target experiments;
 - Research and development on accelerator physics and technology, including:

- Commissioning the Large Hadron Collider (LHC) accelerator at CERN;
 - R&D for the LHC luminosity upgrade including high-field superconducting magnets;
 - Damping rings and Beam Delivery Systems for advanced accelerator technology, using the Accelerator Test Facility (ATF, including the ATF2 project) at KEK;
 - Design, fabrication and tests of high-gradient X-band accelerating structures.
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- Theoretical physics;
 - Information Technology;
 - Japanese participation in CERN's training programme for summer students;
 - Any other area of activity agreed by the Parties.

Article 2

Implementation through Appendices

The exact scope of each specific collaboration shall be defined in an Appendix to this Agreement. The Appendix shall define the object of collaboration, the contributions of the Parties in terms of personnel (time and duration), finances and material, the time schedule and the management structure of the project. Each Appendix shall be subject to the provisions of this Agreement and shall be attached to it as an integral part, it being understood that in case of contradiction or ambiguity, the provisions of the Appendix shall prevail.

Article 3

The CERN-KEK Committee

- 3.1 The Parties shall establish the CERN-KEK Committee ("the Committee") whose duty shall be to discuss and monitor the collaboration.
- 3.2 The Committee shall consist of three members from each Party, who shall be nominated by corresponding Directors-General. The Committee shall take its decisions by consensus.

- 3.3 The Committee meeting shall take place at least once per year, and members shall be free to delegate if they are unable to attend.
- 3.4 The Committee shall receive reports from the leaders of projects agreed within the framework of this Agreement.
- 3.5 The Committee shall report its meeting in minutes which shall be provided to both Directors-General.

Article 4

Intellectual Property

- 4.1 Information disclosed under this Agreement by one Party to the other Party shall not create any proprietary right in respect of such information for the receiving Party.
- 4.2 Subject to such restrictions as may apply, each Party shall make available to the other Party, free of charge, in writing or in any other appropriate form, its existing intellectual property, whether protected or not, for the exclusive purpose of its use, by the other Party only, under this Agreement.
- 4.3 Title in intellectual property developed by a Party in the framework of this Agreement shall be vested in that Party, who shall grant a free, non-exclusive license to such intellectual property to the other Party, for the exclusive purpose of its use, by the other Party only, under this Agreement, as well as for the latter's internal research purposes.
- 4.4 Where intellectual property is jointly vested in the Parties, they shall agree on ways of protecting, and of making available to third parties, such intellectual property, provided that in any event, they shall grant to each other a free, non-exclusive license to such intellectual property for the exclusive purpose of its use, by the receiving Party only, under this Agreement, as well as for the latter's internal research purposes.

- 4.5 The providing Party provides no warranty, including but not limited to those of fitness for purpose and non-infringement of intellectual property rights held by third parties, in respect of intellectual property made available by it to the other Party under this Agreement, and the receiving Party shall hold the providing Party free and harmless from any liability arising from its use (including, if permitted, any sub-licensing) of such intellectual property.

Article 5

Confidentiality

- 5.1 Each Party shall treat as confidential any information provided to it by the other Party and designated as confidential or of which its confidential character should reasonably be understood. Except as agreed otherwise in writing, this confidentiality obligation shall continue for a period of five (5) years from the date of termination of this Agreement. The receiving Party shall not use such information for any purpose other than the execution of this Agreement and shall not disclose it to any third party without prior written permission of the disclosing Party.
- 5.2 No confidentiality obligation shall apply to information which the receiving Party demonstrates was in the public domain prior to its communication by the disclosing Party; became part of the public domain after such communication but not through any fault of the receiving Party; was already in possession of the receiving Party at the time of signature of this Agreement; has been lawfully received by the receiving Party from a third party without any confidentiality obligation; or has been developed by the receiving Party independently and outside the scope of this Agreement.

Article 6

Publications

- 6.1 In accordance with the principle of providing open access to information, but subject to the provisions of Articles 4 and 5 of this Agreement, the Parties shall strive to jointly publish the results of their collaboration.
- 6.2 In so far as the Parties do not jointly publish the results of their collaboration, publications by one Party involving results developed by the other Party shall be subject to the latter's prior written consent. Such consent shall not unreasonably be withheld.

- 6.3 All publications shall acknowledge the collaboration between the Parties, including, if so requested by a Party, the persons having taken part in the development of the results which form the object of the publication.

Article 7

Exchange and Status of Personnel

- 7.1 Subject to detailed agreement, each Party shall deploy its personnel at the other Party if so required for their collaboration. Such personnel shall during their association with the other Party remain employed by, and receive a salary from, the sending Party, who shall furthermore be responsible for ensuring, whether through itself or directly through its personnel, that there shall at all times during the association be insurance cover against illness (including maternity) and accidents for the employee and the members of his/her family, valid in the country of the receiving Party, and against disability and death resulting from professional or non-professional illness and accidents of the employee. The sending Party shall hold the receiving Party free and harmless from any liability, including as may arise in case of failure to keep any part of the insurance cover defined above in place during the association.
- 7.2 The receiving Party shall provide assistance in finding adequate housing for personnel made available by the other Party.
- 7.3 Unless agreed otherwise in writing, the sending Party shall bear the cost of the association of its personnel.
- 7.4 During their association the personnel shall be subject to the safety and other regulations in effect at the receiving Party. The receiving Party shall be entitled to refuse access or remove from its site any personnel which fail to comply with applicable regulations or whose presence is otherwise deemed undesirable.

Article 8

Exchange of Equipment

Unless agreed otherwise in writing, any equipment made available by one Party to the other Party for the purpose of the collaboration shall remain the property of the sending Party and the cost of transportation, including transportation insurance for the full replacement value, shall be borne by the receiving Party. Unless agreed otherwise in writing, the sending Party shall be responsible for compliance with

export regulations, including any fiscal issues, and the receiving Party shall be responsible for compliance with import regulations, including any fiscal issues.

Article 9 Liability

- 9.1 Except in case of gross negligence or willful misconduct by the other Party or as may result from the application of Articles 4 or 7 of this Agreement, each Party shall bear its own loss and damage in connection with this Agreement. It is understood however that except as may result from the application of Articles 4 or 7 of this Agreement, no Party shall be liable to the other Party for any indirect or consequential loss or damage.
- 9.2 Notwithstanding anything stated in Article 9.1 of this Agreement, each Party shall be exclusively liable for loss or damage caused by it to third parties in connection with this Agreement.

Article 10 Disputes

The Parties shall do their utmost to settle any differences which may arise in relation to their collaboration amicably, failing which they shall agree on their settlement through arbitration in accordance with such procedure as they shall define.

Article 11 Status of Previous Agreements

The Parties understand that this Agreement cancels and replaces all previous Agreements on the same subject matters, with the exception of the Memorandum concerning the Participation of Japanese Summer Students in the CERN Summer Student Programme, signed in October 2003, which will henceforward be considered as Appendix 1 of this Agreement.

Article 12 Duration

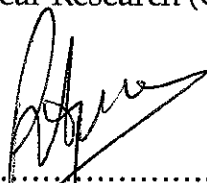
This Agreement shall enter into force upon its signature by the Parties. Its initial duration shall be five (5) years, which shall be renewed automatically for one-year periods, until terminated by joint agreement or by one Party giving the other six (6) months prior written notification. Articles 4, 5, 7, 9 and 10 of this Agreement shall survive its termination.

Article 13 Amendments

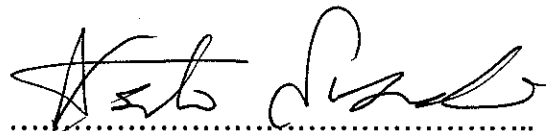
Any modification of this Agreement, including of any Appendix, shall be subject to the conclusion of a written amendment.

Thus drawn up in two copies in the English language only and signed in Philadelphia, on 2nd August 2008.

for the European Organization for
Nuclear Research (CERN)


.....
Dr. Robert Aymar
Director-General

For the High Energy Accelerator
Research Organization (KEK)


.....
Dr. Atsuto Suzuki
Director-General

MEMORANDUM

between

**THE HIGH ENERGY ACCELERATOR RESEARCH
ORGANIZATION (KEK)**

and

**THE EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH
(CERN)**

**CONCERNING THE PARTICIPATION OF JAPANESE STUDENTS
IN THE CERN SUMMER STUDENT PROGRAMME**

October 2003

The High Energy Accelerator Research Organization («KEK»), established at 1-1 Oho, Tsukuba, Ibaraki 305-0801 Japan, for the purpose of this Memorandum represented by Professor Yoji Totsuka, Director-General,

on the one hand,

and

The European Organization for Nuclear Research («CERN»), an Intergovernmental Organization having its seat at Geneva, Switzerland, for the purpose of this Memorandum represented by Professor Luciano Maiani, Director-General,

on the other hand,

(hereafter collectively referred to as «the Parties»);

HEREWITH AGREE:

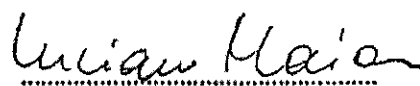
- 1 that they shall co-operate on the participation of Japanese students in the CERN Summer Student Programme («the Programme»), subject to the conditions stated hereunder;
- 2 that the participation of Japanese students in the CERN Summer Student Programme shall be decided in accordance with the rules of the Programme, it being understood, however, that by way of exception, in view of differences in school terms, Japanese students at the first grade of graduate studies shall be allowed participation in the Programme;
- 3 that KEK, in consultation with CERN, shall be responsible for advertising the Programme in Japan and for the selection of Japanese candidates for participation;
- 4 that the parties shall in due course agree on administrative aspects of the Japanese participation;
- 5 that this understanding shall cancel and replace any previous agreement which they may have had in connection with this subject matter;
- 6 and that any difference which they may have in relation to this Memorandum shall be settled amicably.

Drawn up in two copies in the English language and signed on October 24, 2003 by

For the High Energy Accelerator Research
Organization (KEK)


.....
Yoji Totsuka
Director-General

For the European Organization
for Nuclear Research (CERN)


.....
Luciano Maiani
Director-General

APPENDIX 2 TO THE AGREEMENT ON COLLABORATIVE WORK ICA-JP-0103

Collaboration on High Gradient Accelerator Technology Centred at Fabrication and Tests of X-Band Accelerating Structures

Preamble

The Parties have entered into an Agreement on Collaborative Work ICA-JP-0103.

Article 2 of said Agreement stipulates that "the exact scope of each specific collaboration shall be defined in an Appendix."

1. Objective of the collaboration

Both KEK and CERN in the past decade have been forerunners in the world for the R&D's of high gradient acceleration on the basis of normal conducting accelerator structures. The objective of this collaboration is to facilitate further development of related key technologies, in particular the X-band technologies, by the two parties.

2. Personnel of the Collaboration:

KEK: Yukihide Kamiya, Director of Accelerator Laboratory of KEK
Toshiyasu Higo, Accelerator Laboratory of KEK
Shigeki Fukuda, Accelerator Laboratory of KEK.

CERN: Jean-Pierre Delahaye, Accelerators and Beams Department
Walter Wuensch, Accelerators and Beams Department.

3. Duration of the Collaboration:

This Appendix shall be valid initially until 31 March 2011.

4. Scope of the Collaboration:

4.1 CERN's scope:

CERN provides the necessary technical information and other supports upon request by KEK to conduct the research activities in 4.2. CERN utilizes the CTF and related facilities and equipments needed for this collaboration.

4.2 KEK's scope:

KEK utilizes the Nextef and related facilities and equipments needed for experimental studies and evaluations of high-gradient accelerator structures.

KEK builds test accelerating structures for these studies, including fabrication of CLIC structures, first a quadrant, then possibly a high-power-ready unit.

4.3 Future studies:

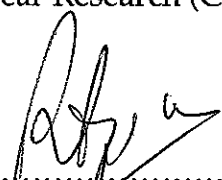
Further collaboration items may be defined by common agreement between CERN and KEK based on the outcomes of the initial tests.

5. Modification and Termination:

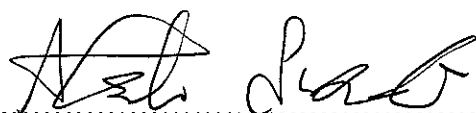
This Appendix may be amended by written agreement by the Parties.

Thus drawn up in two copies in the English language only and signed in Philadelphia, on *22 August*.....2008.

for the European Organization for
Nuclear Research (CERN)


.....
Dr. Robert Aymar
Director-General

For the High Energy Accelerator
Research Organization (KEK)


.....
Dr. Atsuto Suzuki
Director-General