Cooperation Agreement

between

Deutsches Elektronen-Synchrotron DESY Notkestraße 85, D - 22603 Hamburg (in the following called 'DESY')

and

Institue for Nuclear Research (INR) of the Russian Academy of Science 60th Oct. Anniversary Prospect 7a, 117312 Moscow (in the following called 'INR')

Preamble

The current activities at DESY and at INR (henceforth referred to as 'Parties') have common educational, scientific and technological goals and thus provide a good foundation upon which to build a mutually beneficial scientific collaboration. Therefore the Parties hereby conclude this Cooperation Agreement.

Article 1 Objective and Scope

- (1) The objective of this Memorandum of Understanding is to establish the legal framework for the cooperation between DESY and INR.
- (2) The Parties shall cooperate in the field of neutrino astrophysics.

Article 2 Forms of Co-operation

The co-operation between DESY and INR is focusing on the field of astroparticle neutrino physics. DESY is participating in the IceCube experiment, and has made substantial contributions to the Baikal neutrino project. The new phase of co-operation now focuses on working visits of Russian physicists to DESY with the aim to evaluate final Baikal data, to publish the final Baikal data, to transfer knowledge between IceCube and the Baikal project and for educational aspects.

Article 3 Appendices

Specifications on cooperation can be defined in Appendices. Each Appendix includes the object of cooperation, the contributions of the Parties in terms of personnel (time and duration of delegations), finances and material, the time schedule and, if relevant, the structure of the project (project management). 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 4 Guidelines

The Parties agree to cooperate and communicate in the most effective way in order to carry out the activities of the collaboration. In their cooperation the Parties will share information and technology in a way that respects and preserves intellectual property rights according to the following articles.

Article 5 Exchange of Knowledge

- (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.
- (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.
- (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) 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.
- (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 6 Confidentiality

(1) The Parties agree that the open exchange of information shall honour the following principles:

The Parties shall treat any information, which is appropriately designated as such, unless otherwise agreed in writing, for the duration of this agreement and for a period of five (5) years thereafter, strictly confidential. The Parties shall take all appropriate steps to safeguard the confidential information. Accordingly, the receiving Party shall not use any such information for any purpose other than in accordance with the terms of the agreement and the receiving Party shall not disclose any such confidential information to any third party, and such information shall neither be reproduced or duplicated in any form.

(2) The aforementioned shall not apply to information for which the receiving Party can prove that it had a public nature prior to its communication by the disclosing Party or fell within the public domain after such communication but though not fault of its own; was already in its possession at the time of signature of this Agreement; is

received from a third party without any obligation to keep it confidential; is developed by the receiving Party independently outside the scope of this Agreement.

Article 7 Property Rights

Inventions belong to the Party whose personnel have made them. Joint inventions belong to both Parties who have to agree in each case on the sharing and the joint exploitation.

Article 8 Publications

- (1) In accordance with the principle of providing open access to information, the Parties strive to jointly publish the results of the cooperation
- (2) In so far as the Parties do not publish the work results together, 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.
- (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 9 Exchange of Personnel

- (1) Subject to detailed agreement, each Party shall make its personnel available to the other Party if so required for collaboration. Such personnel shall during their association with the other Party remain employed by the sending Party. The sending Party shall be exclusively responsible for health, accident insurance and general liability insurance for such personnel. 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.
- (2) The receiving Party provides assistance in finding adequate housing for the delegates.
- (3) The cost of each delegation shall be borne by the delegating Party, unless specifically agreed otherwise.
- (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 10 Exchange of Equipment

Equipment sent by one Party to the other Party for the purpose of the cooperation shall remain the property of the sending Party unless otherwise agreed. Cost of transportation shall, unless otherwise agreed, be borne by the receiving Party. The receiving Party shall act as importer and be responsible for all formalities, including customs, import excise tax etc. More details will be agreed upon in appendices (Art. 3).

Article 11 Liability

- (1) Except in case of gross negligence or wilful misconduct or as may result from the application of Article 5 or Article 6 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 5 or 6 of this Agreement, no Party shall be liable to the other Party for any indirect or consequential loss or damage.
- (2) Notwithstanding anything stated in this Arcticle, each Party shall hold the other Party free and harmless from any liability for loss or damage caused by the former Party to third parties.

Article 12 Disputes

The Parties shall do their utmost to settle amicably any differences and difficulties which may arise during the cooperation.

Article 13 Duration

(1) This agreement shall enter into force upon its signature by the Parties. Its initial duration shall be two 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 5, 6, and 7 of this Agreement shall survive its termination.

Article 14 Changes, Language

- (1) Changes of this agreement and all amendments and appendices to this agreement have to be agreed upon in writing and shall be signed by the Parties. This also applies to an amendment of the form requirement.
- (2) In case of query, the English version of this agreement prevails.

Hamburg, 17. 11. 2668

Deutsches Elektronen-Synchrotron DESY

Prof. Albrecht Wagner Chair of the Directorate

Christian Scherf Administrative Director

Dr. Ulrich Gensch

Representative of the Directorate

Dr. Ralf Wischnewski

Coordinator

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Prof. Dr. Grigori V. Domogatsky

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Astrophysics