MEMORANDUM OF UNDERSTANDING

BETWEEN

HOMI BHABHA NATIONAL INSTITUTE

AND

TATA INSTITUTE OF FUNDAMENTAL RESEARCH, MUMBAI

1. Preamble

The Tata Institute of Fundamental Research, Mumbai (hereafter referred to as TIFR) a grant-in-aid institution of the Department of Atomic Energy, Government of India (hereafter referred to as DAE) and a Deemed to be University, is a premier research institution in fundamental sciences, and the Homi Bhabha National Institute (hereafter referred to as HBNI), a Deemed to be University established under the aegis of the DAE, is a premier research university. For the purpose of academic programmes, the following units of DAE are the Constituent Institutions (CIs)/Off Campus Centre (OCC) of HBNI:

Constituent Institutions (CIs)

- 1. Bhabha Atomic Research Centre (BARC), Mumbai
- 2. Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam
- 3. Raja Ramanna Centre for Advanced Technology (RRCAT), Indore
- 4. Variable Energy Cyclotron Centre (VECC), Kolkata
- 5. Saha Institute of Nuclear Physics (SINP), Kolkata
- 6. Institute of Plasma Research (IPR), Gandhinagar
- 7. Institute of physics (IOP), Bhubaneswar
- 8. Harish Chandra Research Institute (HRI), Allahabad
- 9. Tata Memorial Centre (TMC), Mumbai
- 10. Institute of Mathematical Science (IMSc), Chennai
- 11. National Institute of Science Education and Research (NISER), Bhubaneswar. (OCC)

RECOGNISING that the long-standing collaboration and cooperation between TIFR and some of the CIs of HBNI are ongoing because of individual initiatives such as pursuit of research leading to Ph.D. by employees CI/OCC under the external registration programme of TIFR and co-supervision of Ph.D. students at TIFR by the scientists/faculty of CIs/OCC and the faculty of TIFR, and

RECOGNISING that, in view of the commonality between the educational and research interests of TIFR and the CIs/OCC of HBNI, there is scope of further expansion of the existing collaboration and cooperation, TIFR and HBNI, collectively referred to as "Partner Institutes"

HEREBY agree to create a long-term institutional partnership in education and research, according to the broad framework set forth in this Memorandum of Understanding (MoU).

2. Objectives:

- a) To enhance collaborative research in the areas of mutual interest, both in extent and scope, by using the medium of research students enrolled in the partner Institutes.
- b) To jointly work to promote educational programs in the domain of nuclear sciences

3. Modalities of cooperation

- 3.1 A student registered under a supervisor for M.Tech./Ph.D. in one Partner Institute (hereafter referred to as Parent Institute) can have a co-supervisor from the other partner Institute. To that end, the Supervisor from the Parent Institute of the student will identify and seek concurrence of a faculty member from the Partner Institute to take up the responsibility of being a co-supervisor. The arrangement will come into effect after the supervisor and the co-supervisor obtain approval for the same from their respective institute.
- 3.2. The Ph.D. students in one Partner Institute may carry a part of the course work in the other Partner Institute with credit transfer. In particular,
 - 1) The courses to be credited to the student for attending a course in the Partner Institute will be determined by the Parent Institute of the student.
 - 2) To facilitate the process of a student attending a course in the Partner Institute, the supervisor of the student in the Parent Institute will put up a proposal (in consultation with appropriate academic bodies of his institute) to the Dean (Academic Programme) TIFR/Dean (HBNI) as the case may be.
- 3.3. The Parent Institute shall be responsible for paying to the Partner Institute the tuition fee, if any, for participation of its students in the course work conducted at the Partner Institute.
- 3.4. The ongoing exchange of faculty for lectures and research for short periods shall be further strengthened.
- 3.5. TIFR will continue interactions with the CIs of HBNI towards identifying and pursuing research programmes that could lead to a degree from HBNI / TIFR.
- 3.6. HBNI and TIFR will work together to create and disseminate courses and other educational material related to different areas of science including nuclear science that could benefit students and researchers inside and outside DAE. Such joint courses will be identified by interaction between Boards of Studies in HBNI with corresponding Subject Boards of TIFR.
- 3.7. Any issues related with the Intellectual Property Right (IPR) with regard to the outcome of the collaborative research and the outcome of thesis/projects work carried out under the

joint supervision of the faculty from the Partner Institutes shall be governed through mutual agreement and within the framework of IPR policies of both the institutes.

3 Implementation

- 3.1 This MoU becomes effective from the date it is signed by the Partner Institutes and will be valid for an initial period of five years. The agreement may be extended by mutual consent. In case one Partner Institute wishes to cancel the MoU, written intent to that effect will have to be communicated by June of that year. The MoU in that event will cease to be operative from the end of the year i.e. from December 31 of the year in question. However, the commitments already made under this MoU before its lapse or termination will be fulfilled
- 3.2 For implementation of this MoU, the following will be the contact persons
- From HBNI
- Dean, HBNI (i)
- Dean Academic of the CI/OCC (ii)
- From TIFR Dean, Graduate Studies, TIFR

Signed on Third day of Dec	omber 2018
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For and on behalf of

For and on behalf of

Homi Bhabha National Institute

Tata Institute of Fundamental Research

Vice Chancellor, HBNI

Witnessed by

Witnessed by

Dean, HBNI

Dean, Graduate Studies, TIFR