MEMORANDUM OF UNDERSTANDING (MoU) BETWEEN ARYABHATTA RESEARCH INSTITUTE OF OBSERVATIONAL SCIENCE (ARIES), NAINITAL AND CENTRAL UNIVERSITY OF HIMACHAL PRADESH, DHARAMSALA

This Memorandum of Understanding hereinafter referred to as MoU is signed on this 25th day of June in the year 2021 between the Aryabhatta Research Institute Of Observational Science (ARIES), Nainital, hereinafter called "ARIES" which expression, unless otherwise provided, shall include its successors and assignees, on the one part and the Central University of Himachal Pradesh, Dharamshala, District Kangra (Himachal Pradesh)-176215, hereinafter called "CUHP" which expression, unless otherwise provided, shall include its successor of assignees on the other part.

1. Preamble:

1.1 Whereas the Central Council for Indian Medicines and the University Grants Commission (UGC) have realized the need for a close linkage between National Laboratories and Universities in terms of research and academic activities. In compliance to this idea, the Aryabhatta Research Institute Of Observational Science (Aries), Nainital, and the Central University of Himachal Pradesh (CUHP), established under the Central Universities Act 2009, have expressed a desire to join hands for the cause of promotion of quality research and high end science and decided to sign Memorandum of Understanding (MOU) to initiate academic and research programmes between the two Institutions in the broad areas of Physics, Astrophysics, Astronomy, Astronomical instrumentations and Atmospheric Sciences as per the following terms and conditions:

25/66/07/

215

2. Recitals

- 2.1 AND WHEREAS both the ARIES and the CUHP recognize that they share common goals and are desirous to establish a cooperative arrangement towards strengthening Indian higher education and research through mutual resource sharing.
- 2.2 AND WHEREAS both organizations are desirous to associate in all other related areas as may be agreed upon for furtherance of knowledge based enterprises, apt technical and management skill for future technology development, exchanging of information and work towards effective Research Institutions-Academia partnerships for Human Resource Development and R&D.
- 2.3 NOW THE PARTIES (ARIES and CUHP) HEREBY ACKNOWLEDGE AND agree to collaborate on collaborative and joint research work in the various areas of mutual interest by entering into this MoU covering the activities as detailed below:

3. Period of MoU and its Extension

- 3.1 This MoU comes into effect from the date of its signing and will remain in force till the completion of five (05) years. Its validity can be extended by mutual agreement between both the parties.
- 3.2 This MoU supersedes all the previous correspondences and discussions, undertakings and agreement between the two parties on the subject pertaining to this MoU.

4. Scope of MoU

4.1 The scope of the MoU will be to collaborate for research and teaching in the designated subjects related to Physics, Astrophysics, Astronomy, Astronomical instrumentations and Atmospheric Sciences. Both the Parties here wish to record the

- Sam Gur

following main areas of cooperation on mutually agreed terms and conditions.

- 4.1.1 Mutual sharing of infrastructural facilities for pursuing research and conducting R&D programmes.
- 4.1.2 Knowledge sharing in the field of subjects related to Physics, Astrophysics, Astronomy, Astronomical instrumentations and Atmospheric Sciences.
- 4.1.3 Exchange of faculty/Research Degree scholar in regular courses and training programmes from both the institutions. For the mutual benefit of the two Institutions, there will be an exchange of faculty members/Research Degree scholars of the concerned school of CUHP.
- 4.1.4 Collaborative and Joint research projects by the ARIES scientists/FACULTY and faculty members of the concerned schools of CUHP through mutual sharing of the research facilities at ARIES and CUHP.
- 4.1.5 ARIES and CUHP will work closely to generate appropriately trained manpower in the mutually identified areas of Science & Technology through organization of formal academic curricula, symposia, short-term training courses, etc. TA/DA for scientists and research scholars will be borne by the respective organizations.
- 4.1.6 Faculty/ P.G./Ph.D. Scholars of one institution may work in the other institution for a short period in connection with their research work. They shall be considered on duty with the parent organisation for that period. TA/DA for scientists

SAM STM

M

and research scholars will be borne by the respective organizations.

4.1.7 Faculties of one institution will be encouraged to deliver expert lectures/ invited talks at other institutions. In such cases TA/DA will be borne by the host institute. These visits/ training would be performed with the approval of competent authority.

4.2 Responsibility of CUHP

- 4.2.1 CUHP will recognize ARIES as an accredited Centre for supervising and guiding and pursuing research, leading to MPhil/PhD degree in the designated subjects related to Physics, Astrophysics, Astronomy, Astronomical instrumentations and Atmospheric Sciences.
- 4.2.2 CUHP will recognize ARIES Scientists/Faculty, subject to the fulfilment of eligibility requirements as per the Act, Statutes and Ordinances of the University, as supervisors for guiding research leading to MPhil/PhD degrees.
- 4.2.3 CUHP will, subject to the fulfilment of eligibility requirements as per the Act, Statutes and Ordinances of the University, confer the status of Adjunct Professor, Adjunct Associate Professor and Adjunct Assistant Professor on ARIES scientists/Faculty depending upon their qualifications and designations, involved in collaborative research and teaching with CUHP.
- 4.2.4 CUHP shall provide access to Library and research facilities to the Scientists/Faculty and PhD students of ARIES and that they shall be governed by the rules and regulations of

- Empfin

the University as applicable to the faculty and research scholars of the University.

4.3 Responsibility of ARIES

- 4.3.1 ARIES shall provide access to its Library and research facilities to the students and faculty members of concerned schools of the CUHP and that they shall be governed by the rules and regulations as applicable to the ARIES Scientists/Faculty.
- 4.3.2 ARIES will provide summer training, research facilities to students (not more than 10 at a time) and ARIES Scientists/Faculty will help in the preparation of teaching material for these students.
- 4.3.3 ARIES shall arrange Hostel/Guest House accommodation for Central University of Himachal Pradesh students coming for summer trainings subject to availability of accommodation and in accordance to the guidelines for accommodation charges by ARIES
- 4.3.4 ARIES Scientists/Faculty recognised by the CUHP as Adjunct Professor, Adjunct Associate Professor and Adjunct Assistant Professor will be permitted to be involved in teaching and evaluation of students' performance in theory as well as practical classes in the CUHP.

4.4 Collaborative Research Degree (MPhil/PhD) Programme

4.4.1 ARIES and the CUHP shall, subject to their rules and regulations and through mutual consultation, evolve a collaborative Research Degree (MPhil/PhD) programme.

E AMBury

DB

- 4.4.2 Modalities of the collaborative research degree programme shall be worked out by the two organisations through mutual consultations and with due regard to the Act, Statutes and Ordinances of the CUHP and the rules and regulations governing the ARIES.
- 4.4.3 The student shall be required to submit 'No Dues Certificate' from the Co-guide from ARIES before submission of thesis.
- 4.4.4 The student shall submit a copy of his/her thesis to the ARIES Library.

5. Areas of Collaborative Research

5.1 Areas of collaborative research shall be worked out mutually between the two parties keeping in view the research needs and priorities of the two parties and also depending upon the research expertise and research facilities available in the ARIES and the CUHP.

6. Co-ordination & Progress Review Committee (CPRC)

- 6.1 It is agreed that the progress of this MOU shall be monitored by a Review Committee comprising the Vice-Chancellor of the CUHP and the Director ARIES through periodic meetings.
- 6.2 Director of the ARIES and Dean of the School concerned from CUHP would be the coordinators for activities under this MoU.

7. Financial Terms

7.1 There shall be no financial obligations on the part of the ARIES and CUHP. Expenditures related to sample preparation, and

Emy Bus

DB

experimentation would be borne by respective labs at their own end.

8. No Liability Clause

- 8.1 ARIES shall not be responsible for any loss or damage whatsoever, resulting due to implementation of any technology at the premises of CUHP or ARIES or due to testing of the same at the premises of CUHP or ARIES
- 8.2 CUHP shall not be responsible for any loss or damage whatsoever, resulting due to implementation of any technology at the premises of CUHP or ARIES, or due to testing of the same at the premises of CUHP or ARIES

9. Confidentiality Clause

- 9.1 Both the parties acknowledge the confidentiality of the information, which may be transferred between the parties or obtained or developed during the course of this exchange from time to time as being essential to this MoU and agree not to disclose the same to any third party. However, each party shall be free to disclose this information as is:
 - 9.1.1 In the public domain at the time of disclosure.
 - 9.1.2 Required to be disclosed by official authorities in accordance with applicable law or regulation.
- 9.2 While the parties agree to co-operate and otherwise act in good faith with the view to the successful implementation, there is no financial binding on either party. This MoU is intended to mutual understanding of the parties hereto as at the date thereof.

Em Bus

DIS

- 9.3 Any notice, request or other communication required or permitted to be given under this MoU shall be in writing and shall be delivered in person or by recognized courier service or facsimile, or to the authorized persons of two organisations to be notified separately.
- 9.4 Each of the parties recognizes that the successful implementation of this MOU to the mutual satisfaction and benefit of both the parties will require a significant degree of cooperation and good faith on behalf of both the parties. Each of the parties resolves to act in good faith and in accordance with the spirit of this MOU to implement the provisions in accordance with the mutual desire and in the interests of the parties.
- 9.5 Both the parties undertake not to transfer, for any consideration to be received by it, the know-how/data obtained through this MoU to any other party in any manner whatsoever without prior written approval of each other whether within and beyond the period of this MoU. Both the parties shall take all necessary measures to ensure that the knowledge/data obtained under this MoU is not passed on or disclosed to any third party.
- 9.6 While the parties agree to co-operate and otherwise act in good faith with the view for successful implementation, there is no financial binding on either party. This MoU is intended to mutual understanding of the parties hereto as at the date thereof.

10. Publications

10.1 Publications, if any, in respect of the development of the know-how as envisaged with the prior mutual consent of the two parties shall be in the names of the investigators. Prior

Jam Suns

BB

publications will be avoided where a patent or patents may possibly be taken.

- 10.2 Publications, if any, in respect of the said studies will be with the prior mutual consent of ARIES and CUHP and shall be in the names of both the parties suitability acknowledged by ARIES /CUHP.
- 10.3 Prior publications will be avoided where a patent or patents may possibly be taken.

11. Protection & Disposition of Ownership of Intellectual Property Rights

- 11.1 The ownership of all Background Information and Background Intellectual Property Rights generated by the parties prior to the MoU shall rest with the respective parties. However, parties shall have the right to use such Background Information and Background Intellectual Property Rights for the purposes of the R&D work performed under the MoU.
- 11.2 All Foreground Information and Foreground Intellectual Property Rights created during the R&D work performed under the MoU shall be owned jointly by the parties.
- 11.3 Parties to this MoU shall confer and consult each other regarding filing of Intellectual Property Rights applications including patent applications covering Foreground Information and share equally the attendant expenditure related to filing, prosecution, grant, maintenance etc. of the same.

Sangans

DIS

11.4 In the event of any extraordinary situation including infringement suits filed by third parties, parties shall initiate any action in mutual consultation and agreement.

12. Patent & Patent Infringement

- 12.1 If the know-how developed as a result of a study undertaken under this MoU leads to a patent or patents being taken, the parties hereto shall mutually agree whether or not to apply for a patent/s and if so in which country. Patents taken, if any, will be in joint names of the two parties. The cost of taking out a patent shall be borne by ARIES or CUHP.
- 12.2 In the event of any claim or action being brought against either party to this MoU alleging infringement of a patent of a third party, the parties hereto shall mutually decide whether to defend the claim or not. The cost of defence against any such claims or action shall be borne by the two parties hereto.
- 12.3 In the event of patents being filed, out of the research work of a student working at ARIES for MPhil/PhD thesis under the sole supervision of scientist(s) from the ARIES, the CUHP shall have no claim to IPRs.
- 12.4 In the event of patents being filed, out of the research work of a student working at CUHP for MPhil/PhD thesis under the sole supervision of faculty member(s) of the CUHP, the ARIES shall have no claim to IPRs.
- 12.5 In the event of a patent being filed, out of the research work of a student working at ARIES for MPhil/PhD thesis under the joint supervision of the scientist(s) and faculty member(s) of the CUHP,

Emp Sun

DB

the cost of patenting and any monetary benefits accruing subsequent of filing and maintaining the patents will be shared by ARIES and CUHP on equal basis.

12.6 In the event of a patent being filed out of the collaborative research work between the faculty members of CUHP and the scientists of ARIES the cost of patenting and monetary benefits accruing subsequent to filing and maintaining of the patents will be shared by CUHP and ARIES on equal basis.

13. MoU and its Amendments

13.1 This MoU shall be the principal repository of the terms and conditions agreed to between the parties and no amendment thereof shall take effect or be binding on both the parties unless such amendment is authorized by them and is recorded in writing and signed by the duly authorized representatives of both the parties.

14. Termination

- 14.1 In case it is found by the two parties that the desired objectives cannot be achieved due to any reason(s) whatsoever, this MoU will be treated as terminated by a mutually agreed procedure without any liability on either of the parties.
- 14.2 However the MPhil and PhD students admitted under the collaborative research supervision shall continue to be governed by the same terms and conditions till the completion of their degrees in accordance with the Act, Statutes and Ordinances of the CUHP and the rules and regulations governing the ARIES.

= AMQum

DIS

15. Force Majeure

15.1 Neither party shall be held responsible for non-fulfillment of their respective obligation under this MoU due to the exigency of one or more of the force majeure events, such as, but not limited to Acts of God, War, Flood, Earthquakes, Strike(s), Lockout(s), Epidemics, Riots, Civil commotion etc provided on occurrence and cessation of such events, the party affected by these shall give a notice in writing to the other party within one month of such occurrence and cessation. If the majeure conditions continue beyond six months, the parties shall then mutually decide about the future course of action.

16. Arbitration

- 16.1 Except as otherwise provided elsewhere in the MoU, in the event of any dispute or difference relating to, arising from or connected with the MoU such dispute or difference shall be resolved between the parties by mutual consultation and to the satisfaction of both the parties.
- 16.2 If amicable settlement cannot be reached within 30 days from the date of the occurrence of the dispute, the matter under dispute shall be finally settled without recourse to the courts, in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and amendments thereto, if any.
- 16.3 The Arbitration shall be conducted by the Arbitrator(s) appointed by the mutual consent of both the parties in accordance with the Rules of the said Act. The arbitral award shall be final and binding. The arbitration proceedings shall be held at Dharamshala.

Arry Cars

17. **Hold Harmless**

- 17.1 The ARIES agrees to hold CUHP harmless from any claim or damages arising from the ARIES's performance of work under this contract ARIES shall also hold CUHP harmless without any limitation from any claims or damages raised or damages suffered by the ARIES.
- 17.2 The CUHP agrees to hold ARIES harmless from any claim or damages arising from the CUHP's performance of work under this CUHP shall also hold ARIES harmless without any contract. limitation from any claims or damages raised or damages suffered by the CUHP.

IN WITNESS WHEREOF, the Parties hereto have duly executed this MOU on 25th day of June year Two Thousand and Twenty one.

REGISTRAR

Central University of Himachal Pradesh Dharamshala, H.P.

Central University of

Himachal Pradesh

Dharamshala, H.P.

Aryabhatta Research

Institute of Observational

Science (ARIES), Nainital

Director

Aryabhatta Research Institute Of Observational Sciences (ARIES)

(Under Department of Science & Technology)

CHAIR PERSON, ACADENIEC COMMITTER ARIES.