

**Collaboration Plan
on JINR-APCTP cooperation in nuclear physics and training of researchers for the period 2019-2020**

1. Overview

The present Collaboration Plan has been drawn up in keeping with the letter and spirit of the existing Exchange Agreement between APCTP and JINR of 25th July 2006 and provides for terms of cooperation in programmes of joint research and training, specified below. Since 2007, APCTP and JINR Bogoliubov Laboratory of Theoretical Physics (BLTP) have implemented 14 joint workshops and plan to continue these activities in Busan, Korea in 2019, in Russia in 2020 and later on.

1.1 Objective

- Foster key talents and build a world-wide collaborative research system
- Establish a foundation for JINR-Korea science and technology cooperation

1.2 Programmes

- **Joint research programme:** Exchange of basic science researchers between JINR and Korea
 - Launch visiting programme based on the existing APCTP-JINR network to initiate the cooperation in the science and technology with JINR Member States and partner countries
 - Invite JINR researchers to APCTP for collaborative research
 - Hold academic seminars during the visit and promote the expansion of joint research global networks
- **Partnership academic programme:** Support academic activities specialized in nuclear physics
 - Launch a flagship joint academic programme based on the APCTP-JINR network to advance nuclear physics research
 - Implement an international joint academic activity with JINR (BLTP)
- **Young scientist training programme:** Nurture prominent nuclear physicists
 - Invite a JINR renowned nuclear physicist to ask his/her advice on the Korean basic science research
 - Operate a distinguished scholar-junior researcher matching programme for Korean researchers to learn about his/her insights on the direction of early research and expand a network of joint research

1.3 Strategy

- Enable collaborations and foster key talents through the step-by-step strategy:

	STEP1: Set up a new cooperative network building on the existing APCTP-JINR research collaborations.	STEP2: Expand the cooperative network by promoting academic activities and research.	STEP3: Broaden global partnership by extending the cooperation and maintaining the reciprocal relationship
Joint Research Programme	Exchange of researchers	Long-term placement of competitive researchers from JINR	Launch a new Korea-JINR joint research group
Partnership Academic Programme	Organize academic workshops	Extend participation scope	Develop academic activities into a flagship project in the Asia Pacific region
Young Scientist Training Programme	Invite distinguished JINR scholars to Korea	Give an opportunity for junior scientists to be advised on their research by invited distinguished JINR scholars	Long-term placement of distinguished JINR scholars to train Korean junior scientists.

1.4 Expected outcome

- Build a JINR-Korea science and technology bridge which connects the Asia Pacific region and JINR Member States and partner countries
- Launch a new global research network based on JINR-Korea scientific cooperation to lead research trends in basic science as a major player in the Asian Pacific region.

2. Budget

To support joint activities the APCTP plans to provide financial support as per the following budget:

Joint research programme (8 times per year and KRW 60M in total)	
Local expenses for researchers	Visiting research by JINR researchers - Long-term visit: 14M x 3 persons = 42M - Short-term visit: 2M x 5 persons = 10M
Joint seminar	APCTP-JINR joint seminar 1M x 8 times = 8M
Partnership academic programme (1 time per year and KRW 20M in total)	
Academic activity budget	Organize and run an international academic activity 20M x 1 time = 20M
Young scientist training programme (1 time and KRW 60M in total)	
Invite a scholar	Expenses of inviting a scholar for six months 40M x 1 person = 40M
Hire junior researchers and run the programme	Research fund for collaboration 20M x 1 time = 20M
Total	KRW 140M

APCTP and JINR shall confirm additionally through a formal exchange of letters availability of specific amounts and mechanisms of their payment under above budget.

3. Contacts

Individuals responsible for implementation of joint activities under the Protocol:

- on the part of APCTP: Dr. Woo-Sung Jung, Executive Director, APCTP, woosung.jung@apctp.org
- on the part of JINR: Dr. Nikolay Antonenko, Deputy Director, JINR BLTP, antonenk@theor.jinr.ru

4. Miscellaneous

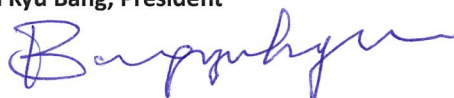
This Collaboration Plan may be modified by mutual consent. The Collaboration Plan shall be in effect from the date of signature for a period of five years. It will be automatically extended for an additional period of five years at each expiration date, unless either party gives six month's advance notice in writing to terminate the agreement.

This Collaboration Plan is to be executed in duplicate copies in English with each of the copies being equally authentic.

Date : 2019.05.17

For and on behalf of APCTP

Yun Kyu Bang, President



Date : 2019.05.17

For and on behalf of JINR

Victor A. Matveev, Director

