

# Cooperation between BLTP and Chinese institutes

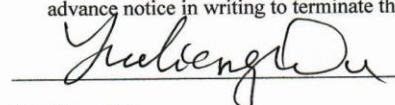
Nuclear physics

Hadron physics

**Exchange Agreement  
Between  
Institute of Theoretical Physics of Chinese Academy of Sciences  
And  
Bogoliubov Laboratory of Theoretical Physics  
of Joint Institute for Nuclear Research**

In order to foster academic and scientific exchange between the Institute of Theoretical Physics of the Chinese Academy of Sciences and the Bogoliubov Laboratory of Theoretical Physics of the Joint Institute for Nuclear Research, the two institutes have agreed upon the following programs based upon principles of mutual equality and reciprocity of benefits.

1. The two institutions will pursue joint activities for cooperation in scientific research in the form of joint workshops, conferences and schools. The details of specific projects will be determined by mutual agreement of both institutions.
2. The two institutions agree to promote the exchange of scientists including young postdoctoral fellows. It may also extend to the graduate students. To this end, when either of the two institutions invites members of the other institution to participate in scientific activities which they are hosting, then the host institution agrees to provide accommodation and pays a per diem to the visiting researchers from the other institution. The nature of the accommodation provided and the per diem to be paid is subject to the expense guidelines of the host institution. Unless otherwise negotiated between the two institutions, international travel expenses are the responsibility of the individual or the individual's institution.
3. Each institution will designate a liaison officer to administer this Agreement and to coordinate cooperative activities between the two institutions.
4. This Agreement may be modified by mutual consent. The Agreement will be in effect from the date of signature for a period of three years. It will be automatically extended for an additional period of three years at each expiration date, unless either party gives six month's advance notice in writing to terminate the agreement.



Yue-Liang Wu

Director  
Institute of Theoretical Physics,  
Chinese Academy of Sciences



V.V. Voronov

Director  
Bogoliubov Laboratory of Theoretical Physics,  
Joint Institute for Nuclear Research

Date: 16 November 2009 Date: 6 November 2009

**BLTP/JINR - KLTP/CAS Joint Workshop  
Physics of Strong Interacting Systems  
Beijing, Guilin, Shenzhen, Guanzhou  
Dubna, Saint-Petersburg,  
Armenia (planned)**

**Scientific cooperation, visits**

Fellowship for Young International Scientists, CAS,  
Beijing, China, 2013, 2015

Peking University, Beihang University  
Nanjing University of Aeronautics and Astronautics

- 1.** C.G.Wang, R.Han, C.Xu, H.Hua, R.A.Bark, S.Q.Zhang, S.Y.Wang, T.M.Shneidman, S.G.Zhou, J.Meng, S.M.Wyngaardt, A.C.Dai, F.R.Xu, X.Q.Li, Z.H.Li, Y.L.Ye, D.X.Jiang, C.G.Li, C.Y.Niu, Z.Q.Chen, H.Y.Wu, D.W.Luo, S.Wang, D.P.Sun, C.Liu, Z.Q.Li, N.B.Zhang, R.J.Guo, P.Jones, E.A.Lawrie, J.J.Lawrie, J.F.Sharpey-Schafer, M.Wiedeking, S.N.T.Majola, T.D.Bucher, T.Dinoko, B.Maqabuka, L.Makhathini, L.Mdletshe, O.Shirinda, K.Sowazi, **Phys. Rev. C 106, L011303 (2022)**
- 2.** O. Chuluunbaatar, A.A. Gusev, S.I. Vinitsky and A.G. Abrashkevich, P.W. Wen, C.J. Lin, **Comp. Phys. Comm. 278, 108397 (2022)**.
- 3.** P. W. Wen, C. J. Lin, R. G. Nazmitdinov, S. I. Vinitsky, O. Chuluunbaatar, A. A. Gusev, A. K. Nasirov, H. M. Jia, A. Gozdz, **Phys. Rev. C 103, 054601 (2021)**.
- 4.** Adamian, G.G., Antonenko, N.V., Lenske, H. Malov L.A., Zhou S.-G, **Eur. Phys. J. A 57, 89 (2021)**
- 5.** E. V. Mardyban, T. M. Shneidman, E. A.Kolganova, R. V. Jolos, S.-G. Zhou, **Chin. Phys. C 42, 124104 (2018)**.
- 6.** Adamian G.G., Malov L.A., Antonenko N.V., Lenske H., Wang Kun, Zhou Shan-Gui, **Eur. Phys. J. A 54, 170 (2018)**.
- 7.** Sargsyan V.V., Adamian G.G., Antonenko N.V., Scheid W., Zhang H.Q., **Phys. Rev. C 95, 054619 (2017)**.
- 8.** A. N. Bezbakh, T. M. Shneidman, G. G. Adamian, N. V. Antonenko, S.-G. Zhou, **Eur. Phys. J. A 52, 353 (2016)**.
- 9.** X. C. Chen, J. Zhao, C. Xu, H. Hua, T. M. Shneidman, S. G. Zhou, *et al.*, **Phys. Rev. C 94, 021301 (2016)**.

**Exchange Agreement**

**Between**

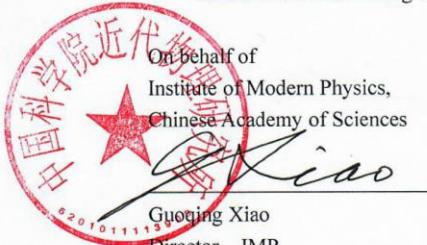
**Institute of Modern Physics of Chinese Academy of Science**

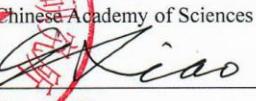
**And**

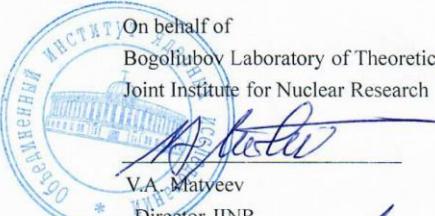
**Bogoliubov Laboratory of Theoretical Physics of Joint Institute for Nuclear Research**

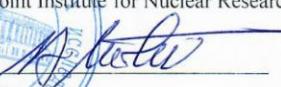
In order to promote scientific cooperation between the Institute of Modern Physics (hereinafter referred to as "IMP") of the Chinese Academy of Science and the Bogoliubov Laboratory of Theoretical Physics (hereinafter referred to as "BLTP") of the Joint Institute for Nuclear Research, the two Institutes have agreed upon the following programs based upon the principles of mutual equality and reciprocity of benefits.

1. The two institutions will pursue joint activities for cooperation in scientific research in the fields of the theoretical nuclear, hadron physics and related topics. The special attention will be paid for the joint research for the physical programs on the current and future facilities at IMP and JINR.
2. The two institutions agree to promote the personal exchange of scientists including young postdoctoral fellows and graduate students. To this end, when either of the two institutions invites members of the other institution to participate in scientific activities which they are hosting, then the host institution agrees to provide accommodation and pays a per diem to the visiting researchers from the other institution. The nature of the accommodation provided and the per diem to be paid is subject to the expense guidelines of the host institution. Unless otherwise negotiated between two institutions, international travel expenses are the responsibility of the individual or the individual's institutions.
3. Each institution will designate a liaison officer to administer this Agreement and to coordinate joint activity between two institutions.
4. This Agreement may be modified by mutual consent. The Agreement will be effect from the date of signature for the 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.



On behalf of  
Institute of Modern Physics,  
Chinese Academy of Sciences  
  
Guoqing Xiao  
Director IMP



On behalf of  
Bogoliubov Laboratory of Theoretical Physics,  
Joint Institute for Nuclear Research  
  
V.A. Matveev  
Director JINR  
  
V.V. Voronov  
Director BLTP  
  
Date:

Date: March 31, 2015

## Scientific cooperation, visits

**L. P. Kaptari, BLTP & IMP (PIFI, Lanzhou, 2018-2019)**

(CAS President's International Fellowship Initiative (PIFI))

**Collaborators:**

Pengming Zhang (Sun Yat-sen University, Zhuhai), Xurong Chen (IMP), Liping Zou (IMP), Xu Yu (Lanzhou Univ., graduate student)

The subject of common interests refers to physics at operating (e.g. **NICA** in Dubna) and planned facilities (**EIC@China**, **ELIC@JLAB**, **ENC@GSI** . . . ): (i) investigations of bound states at zero and finite temperature and phase transitions to **QGP** and (ii) low **x** physics in Deep Inelastic Scattering of electrons off heavy ions.

**Common publications:**

1. L.P. Kaptari ( BLTP& IMP)), B. Kaempfer, P. Zhang (IMP), EPJ Plus **134** (2019) 8, 383.
2. L.P. Kaptari (BLTP& IMP), B. Kämpfer, P. Zhang (IMP), e-Print: 1811.01479.
3. L.P. Kaptari (BLTP& IMP), A.V. Kotikov (BLTP& IMP), N.Yu. Chernikova, Pengming Zhang (IMP), JETPH Letters **109**, issue 5, (2019) 281.
4. L.P. Kaptari (BLTP& IMP), A.V. Kotikov (BLTP& IMP), N.Yu. Chernikova, Pengming Zhang (IMP), Phys.Rev. **D 99** (2019) 9, 096019.

A.V.Kotikov, **BLTP JINR & IMP (PIFI, IMP, Lanzhou, 2017-2018, 2022-2023)**  
(CAS President's International Fellowship Initiative (PIFI))

**Collaborators:**

Xurong Chen (Institute of Modern Physics (IMP), Lanzhou), Pengming Zhang (Sun Yat-sen University, Zhuhai), Liping Zou (IMP, Lanzhou)

The subject of common interest relates to the physics at operating (LHC at CERN, **NICA** in Dubna) and planned facilities (**EIC@China**, **ELIC@Jlab** ...): (i) physics of low  $\times$  Deep Inelastic scattering of electrons and muons by protons, nuclei and heavy ions; (ii)  $k_t$ -factorization.

**Common publications:**

1. A.V. Kotikov (BLTP&IMP), B.G. Shaikhatdenov (VBLHEP), P. Zhang (IMP), **Phys.Rev.D** **96** (2017) **11**, 114002 [1706.01849 [hep-ph]];
2. A.V. Kotikov (BLTP&IMP), B.G. Shaikhatdenov (VBLHEP), P. Zhang (IMP), **Phys. Part. Nucl. Lett.** **16** (2019) **4**, 311 [1811.05615 [hep-ph]];
3. A.V. Kotikov (BLTP&IMP), B.G. Shaikhatdenov (VBLHEP), P. Zhang (IMP), **EPJ Web Conf.** **204** (2019) **05002** [1811.10898 [hep-ph]];
4. L.P. Kaptari (BLTP&IMP), A.V. Kotikov (BLTP&IMP), N.Yu. Chernikova, P. Zhang (IMP), **JETP Lett.** **109** (2019) **5**, 281-285 [1812.00361 [hep-ph]];
5. L.P. Kaptari (BLTP&IMP), A.V. Kotikov (BLTP&IMP), N.Yu. Chernikova, P. Zhang (IMP), **Phys.Rev.D** **99** (2019) **9**, 096019 [1904.04405 [hep-ph]];
6. A.V. Kotikov (BLTP&IMP), A.V. Lipatov (DNLP&SINP MSU), B.G. Shaikhatdenov (VBLHEP), P. Zhang (IMP), **JHEP** **02** (2020) **028** [1911.01445 [hep-ph]];
7. A.V. Kotikov (BLTP&IMP), A.V. Lipatov (DNLP&SINP MSU), P. Zhang (IMP), **Phys.Rev.D** **104** (2021) **5**, 054042 [2104.13462 [hep-ph]].

## Recent steps

International collaboration program from the Ministry of Science and Technology.  
This program aims to support all kind of activities of cooperation between China  
and foreign countries. Jan 2022 to Dec 2023 - approved

*Joint projects NSFC-RSF – applications*

*Visitors from China (short and long term)*  
*Visits to China*