

# Cooperation Agreement

between

the Joint Institute for Nuclear Research (JINR) in Dubna, Russian Federation

and

the Deutsches Elektronen-Synchrotron - DESY,

the Facility for Antiproton and Ion Research (FAIR) GmbH Darmstadt with

the FAIR-Russia Research Center (FRRC) in Moscow, Russian Federation,

the Forschungszentrum Jülich GmbH,

the GSI Helmholtz Center for Heavy Ion Research GmbH with

the Helmholtz Institute Jena and the Helmholtz Institute Mainz,

the Helmholtz-Zentrum Dresden - Rossendorf,

the Karlsruhe Institute for Technology

- HCs -

on the

Collaboration in the Planning and Conduction of the HISS Helmholtz  
International Summer Schools in Dubna 2014 – 2016

Dated 04.11.2014

In view of fruitful and long standing collaboration for science in the partner countries of the JINR and in the Helmholtz Institutions in Germany, the above listed Centers and Institutes of the Helmholtz Association of German Research Centres (HCs) and the JINR Dubna have agreed to the following:

## Article 1:

The JINR and the HCs agree herewith to continue support for the Helmholtz International Summer Schools (HISS), having been conducted twice per year for the past 10 years, until 2016 according to the HISS program listed in **Annex 1** and to jointly share the costs for that, as detailed in **Annex 2**. Insofar that further financial support requests arise, the partners may agree upon them.

The HISS will continue to be organized twice per year, for a duration of 2 weeks and generally convene in the period from July until mid September of a given year. The required annual budget for the organization of two schools per year amounts at present to 70-75 kEuro.

**Article 2:**

The JINR and the HCs are ready to invite, within the framework of the schools, students of natural sciences and young scientists from member countries and associated countries of the JINR to participate in the schools of the HISS and to support their participation from the agreed budget of the actual year. The lecturers invited to the HISS will receive complete reimbursement according to the agreed budget set forth in **Annex 2** to this agreement.

**Article 3:**

The JINR and the HCs will agree on the topics and the detailed scientific content of the schools listed in **Annex 1** no later than the beginning of the year and, in this context, also detail and confirm the financial contributions given in the preliminary plan (**Annex 2**).

**Article 4:**

The Helmholtz Centre DESY has agreed to perform the accounting and reimbursement of the travel costs for lecturers on the basis of the corresponding documents up to an amount of 6.000 Euro per school at DESY (**Annex 2**). The financial contributions of the other HCs to the HISS will be transferred upon request by the JINR in the agreed amount directly to the JINR. The JINR is obliged to report on the spending of the funds to the corresponding HCs in a timely manner after the respective school by providing appropriate documents.

**Article 5:**

The task of coordination and preparation of the schools, and eventually their postprocessing, is entrusted to Prof. Dr. David Blaschke (with deputies Dr. Vyacheslav Zhuravlev and Dr. Jörn Schmelzer at JINR). The coordinator is responsible for coordinating the details of the school programmes as well as the selection of the participants and the lecturers with the sponsors, the HCs and the JINR. Suggestions for participants and lecturers can be submitted by all sponsors of the HISS.

**Article 6:**

The coordinator is responsible for the proper usage of financial resources as well as the preparation and storage of corresponding documents. The coordinator will prepare a short report about the progress and results of the schools and forward it to the sponsors and participants.

**Article 7:**

**Annex 3** of this agreement provides a list of all participating institutions of the HISS, the responsible persons in these institutions, as well as the administrators at DESY and JINR, and the coordinator with his deputies.

**Article 8:**

**Liability:** The partners do not assume liability for each other for damages of property and/or finances, which may occur to the other partner, his colleagues or aides and subsidiaries, in the

realization of this contract and exempt each other from such requests, unless the damage is caused intentionally or by gross negligence. As for other damages, German law applies.

**Article 9:**

**Disputes:** The parties aim to govern all issues arising from the implementation of this agreement by mutual consensus. Any disputes arising from the interpretation or application of this agreement shall be settled through consultation between the parties. For the case that there is a legal dispute under the contract, this will be negotiated under German law.

**Article 10:**

**Final Provisions:** This agreement applies from the date of the last signature herein. It will be valid until 31.12.2016 and can then be extended by mutual, written consent, in which case the annexes and the names of the participating HCs on the cover sheet should possibly be updated.

This agreement has been prepared in corresponding versions in German and English languages. The English version will hereby be considered the official version for all purposes.

For the Joint Institute for Nuclear Research (JINR) Dubna



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Professor Dr. Victor A. Matveev  
Director of the JINR Dubna

For Deutsches Elektronen-Synchrotron DESY

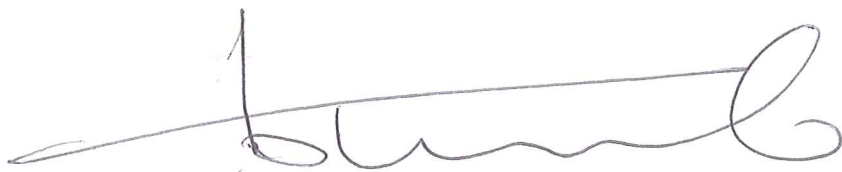


.....  
Professor Dr. Joachim Mnich  
Director in charge of Particle Physics and Astroparticle Physics



.....  
Christian Scherf  
Director of Administration

For the FAIR GmbH (Facility for Antiproton and Ion Research)



.....  
Professor Dr. Boris Sharkov  
FAIR Scientific Director,  
Chairman of the Management Board



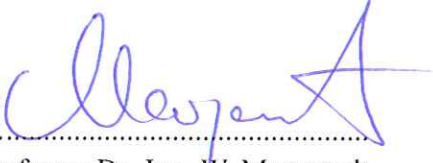
.....  
Ursula Weyrich  
FAIR Administrative Managing Director

For the FAIR-Russia Research Center (FRRC) Moscow



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Professor Dr. Hans Gutbrod  
Co-Director of the FRRC Moscow

For the Forschungszentrum Jülich GmbH



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Professor Dr.-Ing. W. Marquardt  
Chairman of the Board of Directors



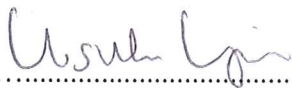
.....  
Professor Dr. Sebastian Schmidt  
Member of the Board of Directors for Scientific Division I



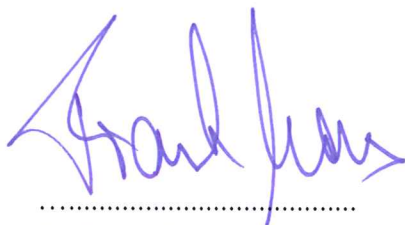
For the GSI Helmholtz Centre for Heavy Ion Research GmbH



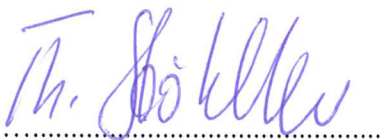
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Professor Dr. Dr. h.c. Horst Stöcker  
Scientific Director



.....  
Ursula Weyrich  
Administrative Managing Director

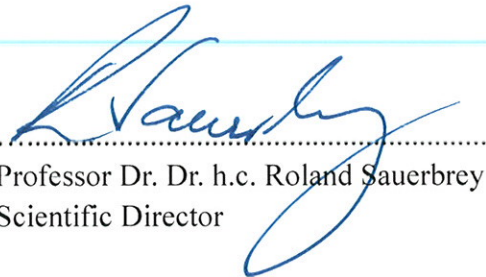


.....  
Professor Dr. Frank Maas  
Director of the Helmholtz Institute Mainz

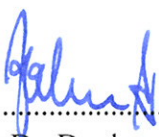


.....  
Professor Dr. Thomas Stöhlker  
Director of the Helmholtz-Institute Jena

For the Helmholtz-Zentrum Dresden - Rossendorf 14.11.2014



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Professor Dr. Dr. h.c. Roland Sauerbrey  
Scientific Director



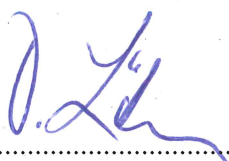
.....  
Professor Dr. Dr. h. c. Peter Joehnk  
Administrative Director

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For the Karlsruhe Institute of Technology



.....  
Dr. Elke Luise Barnstedt  
Vice President



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Professor Dr. Detlef Löhe  
Vice President

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**Annexes on separate pages:**

**Annex 1:**

*The list of planned HISS Schools for 2014 - 2016, which shall be worked out in detail no later than the beginning of the year of the corresponding schools.*

**Annex 2:**

*A List of the sponsors and the total budget for the HISS in 2014, as well as a prognosis for 2015 and 2016, which is to be specified no later than the beginning of the year of the corresponding schools.*

**Annex 3:**

*The list of the members of this agreement, the responsible persons in these institutions, as well as the coordinators and their affiliations.*

**Helmholtz International Summer Schools (HISS) Dubna**

**“Structure of Matter under Extreme Conditions”**

**Scientific Program 2014 – 2016**

Status: October 30, 2014

- Title: Nuclear Theory and Astrophysical Applications  
Organizers: J. Margueron (IPN Lyon), G. Martinez-Pinedo (GSI & TU Darmstadt),  
V. Voronov (JINR Dubna)  
Website: <http://theor.jinr.ru/~ntaa/14>  
Termin: 20.07.-01.08. 2014
- Title: Lattice QCD, Hadron Structure and Hadronic Matter  
Organizers: M. Ilgenfritz (JINR Dubna), O. Philipsen (Uni Frankfurt), O. Teryaev (JINR Dubna)  
Website: <http://theor.jinr.ru/~diastp/summer14>  
Termin: 25.08.-06.09. 2014
- Title: Matter under Extreme Conditions in Heavy-Ion Collisions and Astrophysics  
Organizers: D. Blaschke (JINR Dubna, Uni Wroclaw), M. Bleicher (FIAS, HIC-for-FAIR),  
A.T. Filippov (JINR Dubna), B. Sharkov (FAIR Darmstadt & FRRC Moscow),  
A. S. Sorin (JINR Dubna)  
Termin: 2015
- Title: Modern Colliders - Theory and Experiments  
Organizers: D. Bardin, D. Kazakov (JINR Dubna), K. Melnikov (KIT Karlsruhe),  
J. Reuter (DESY Hamburg)  
Termin: 2015
- Title: Quantum Field Theory at the Limits: from Strong Fields to Heavy Quarks  
Organizers: A. Ali (DESY Hamburg), D. Blaschke (JINR Dubna, Uni Wroclaw),  
H. Gies (HI Jena), M. Ivanov (JINR Dubna), K. Peters (GSI Darmstadt)  
Termin: 2016
- Title: Cosmology, Strings and New Physics  
Organizers: A. Filippov (JINR Dubna), F.R. Klinkhamer (KIT Karlsruhe),  
V. Rubakov (INR Moscow), V. Schomerus (DESY Hamburg),  
A. Starobinsky (Landau Inst. & JINR Dubna)  
Termin: 2016

**Helmholtz International Summer Schools (HISS) Dubna**

**“Structure of Matter under Extreme Conditions”**

**Financial Plan 2014 – 2016**

Status: October 30, 2014

| Year, Name of School   | Total (kEuro) |               | Helmholtz Centres and Institutes |              |              |              |              |              | JINR<br>Dubna |
|------------------------|---------------|---------------|----------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|
|                        | Plan          | Comm          | DESY                             | FZJ          | HZDR         | KIT          | HIM          | HIJ          |               |
| 2014, NTAA             | 36.0          | 36.0          | 6.0                              | 10.0         | 5.0          | --           | --           | 5.0          | 10.0          |
| 2014, Lattice QCD      | 36.0          | 36.0          | 6.0                              | 10.0         | 5.0          | --           | 5.0          | --           | 10.0          |
| 2015, Extreme Matter   | 36.0          | 36.0*         | 6.0                              | 10.0*        | *            | *            | 5.0*         | 5.0*         | 10.0          |
| 2015, Modern Colliders | 36.0          | 31.0*         | 6.0                              | *            | 5.0*         | 10.0*        | *            | *            | 10.0          |
| 2016, QFT Limits       | 36.0          | 36.0*         | 6.0                              | 10.0*        | *            | *            | 5.0*         | 5.0*         | 10.0          |
| 2016, Cosmology        | 36.0          | 31.0*         | 6.0                              | *            | 5.0*         | 10.0*        | *            | *            | 10.0          |
| <b>Total</b>           | <b>216.0</b>  | <b>206.0*</b> | <b>36.0</b>                      | <b>40.0*</b> | <b>20.0*</b> | <b>20.0*</b> | <b>15.0*</b> | <b>15.0*</b> | <b>60.0</b>   |

\*) To be specified at the begin of the year of the school

**Helmholtz International Summer Schools (HISS) Dubna**  
**“Structure of Matter under Extreme Conditions”**

**Kooperationspartner**

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