

WELCOME !

HELMHOLTZ INTERNATIONAL SUMMER SCHOOL

Dubna International Advanced School of Theoretical Physics / DIAS-TH

**Matter under Extreme Conditions
in Heavy-Ion Collisions and Astrophysics**

Bogoliubov Laboratory of Theoretical Physics,
Joint Institute for Nuclear Research, August 20-31, 2018

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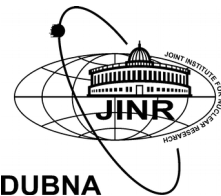


HELMHOLTZ INTERNATIONAL SUMMER SCHOOL

Dubna International Advanced School of Theoretical Physics / DIAS-TH

HISS Dubna

- Created in 2004
- 6 schools in 3 years
- Funding:
 - Helmholtz President
 - DESY + GSI
 - JINR
- 15 Lecturers/ 50 Students
- 10 days + weekend



DUBNA

The First School: Hot points in Astrophysics (2004)

- 29 Stud. from Russia, Belarus, Armenia, Germany, Italy, Poland, Croatia, Japan
- 25 Students from JINR Dubna
- 13 Lecturers from Russia, Ukraine
- 12 lecturers from Germany, Italy, Poland, Korea, Japan, USA
- Lecture notes printed at JINR Dubna Press



David Blaschke - Helmholtz @ JINR Dubna - 24. June 2008

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Startup Topics from the field “Structure of Matter” (2004 - 2006):

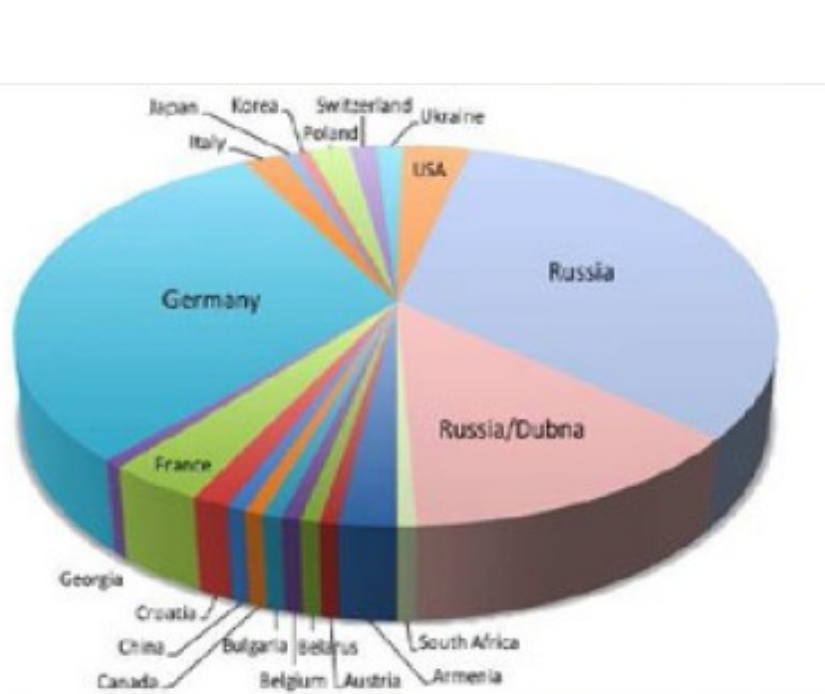
1. Hot Points in Astrophysics and Cosmology (2004) – Belyaev & Blaschke
2. Heavy Quark Physics (2005) – Ali & Ivanov
3. Modern Mathematical Physics (2005) – Lechtenfeld & Filippov
4. Nuclear Theory and Astrophysical Appl. (2005) – Langanke & Voronov
5. Calculations for Modern & Future Colliders (2006) – Riemann & Kazakov
6. Dense Matter in HIC & Astro. (2006) – Wambach & Blaschke & Voronov

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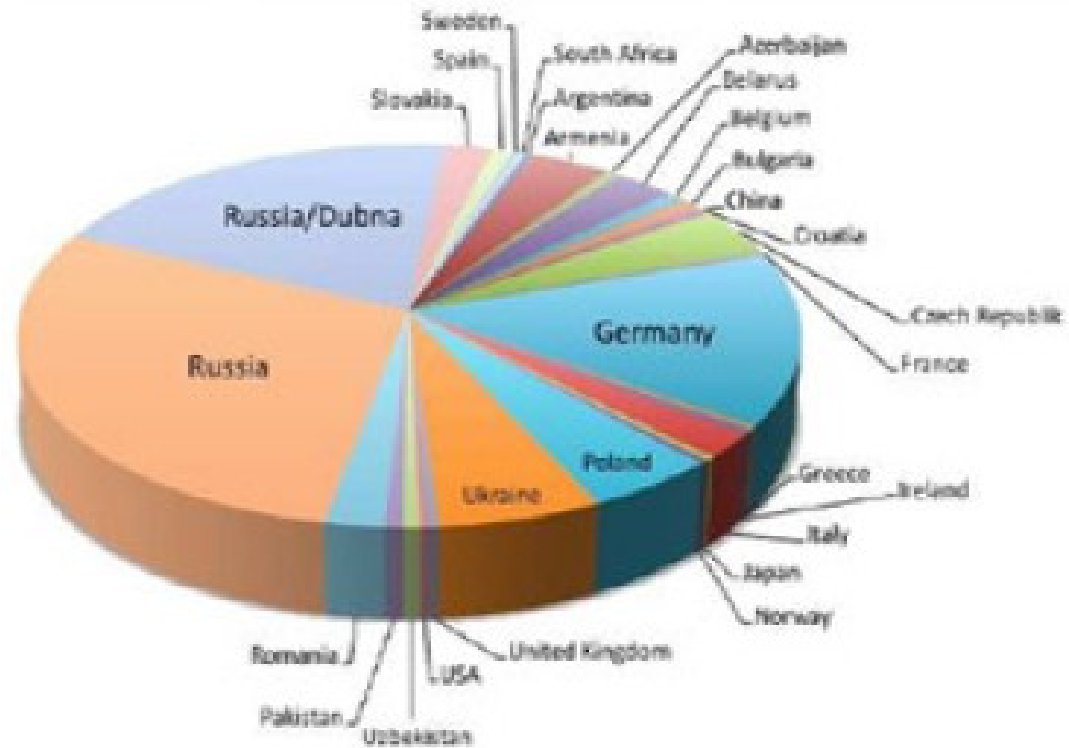
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Statistics of Six Helmholtz International Summer Schools (2004 - 2006)



Total lecturers: 147



Total Students: 315

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The Present and the Future of HISS Dubna

Cooperation Agreement between Helmholtz Centres
And Institutes and JINR Dubna (2014 - 2016)



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

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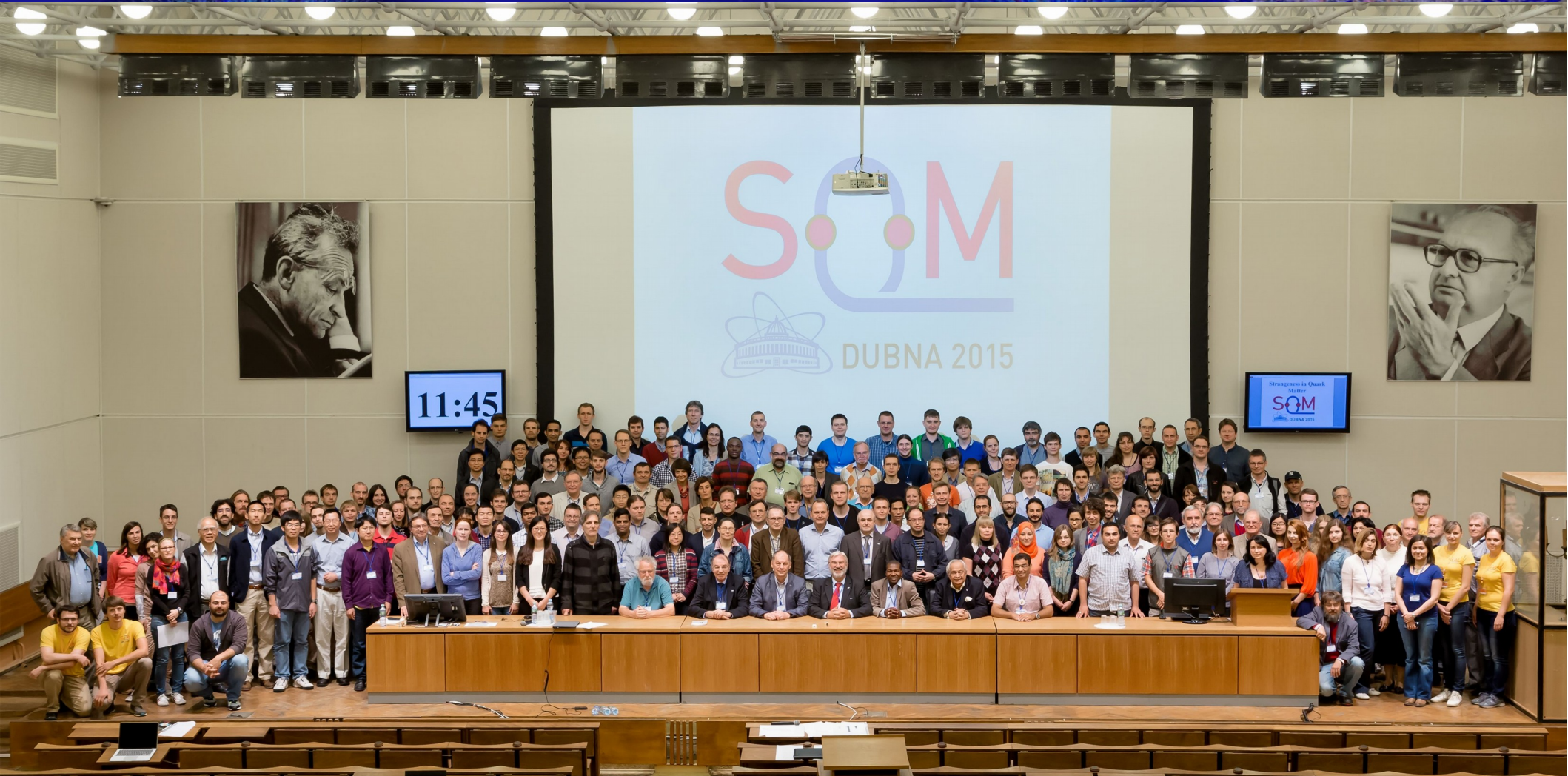
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JINR Mega-Science Project: NICA

<http://theor.jinr.ru/twiki-cgi/view/NICA/WebHome>



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Title: Nuclear Theory and Astrophysical Applications
Organizers: S. Heinz (GSI Darmstadt), V. Voronov (JINR Dubna)
Website: <http://theor.jinr.ru/~ntaa/17>
Termin: 10.-22.07. 2017

Title: Lattice QCD, Hadron Structure and Hadronic Matter
Organizers: O. Kaczmarek (Uni Bielefeld), O. Teryaev (JINR Dubna), M. Ilgenfritz (JINR Dubna)
Website: <http://theor.jinr.ru/~diastp/summer17>
Termin: 20.08.-02.09. 2017

Title: Modern Colliders - Theory and Experiment 2018
Organizers: D. Kazakov (JINR Dubna), J. Reuter (DESY Hamburg)
Website: <http://theor.jinr.ru/meetings/2018>
Termin: 22.07.-01.08. 2018

Title: Matter under Extreme Conditions in Heavy-Ion Collisions and Astrophysics
Organizers: D. Blaschke (JINR Dubna, Uni Wroclaw), M. Bleicher (FIAS Frankfurt),
L. Bravina (Uni Oslo), A. Taranenko (NRNU (MEPhI) Moscow)
Website: <http://theor.jinr.ru/~diastp/summer18>
Termin: 20.-31.08. 2018

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)
Website: <http://theor.jinr.ru/meetings/2019>
Termin: 2019

Title: Cosmology, Strings and New Physics
Organizers: I. Pirozhenko, A.T. Filippov (JINR Dubna), F.R. Klinkhamer (KIT Karlsruhe),
V. Rubakov (INR Moscow), A. Starobinsky (Landau Inst. & JINR Dubna)
Website: <http://theor.jinr.ru/meetings/2019>
Termin: 2019

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

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the GSI Helmholtz Center for Heavy Ion Research GmbH with

the Helmholtz Institute Jena and the Helmholtz Institute Mainz,

the Helmholtz-Zentrum Dresden - Rossendorf,

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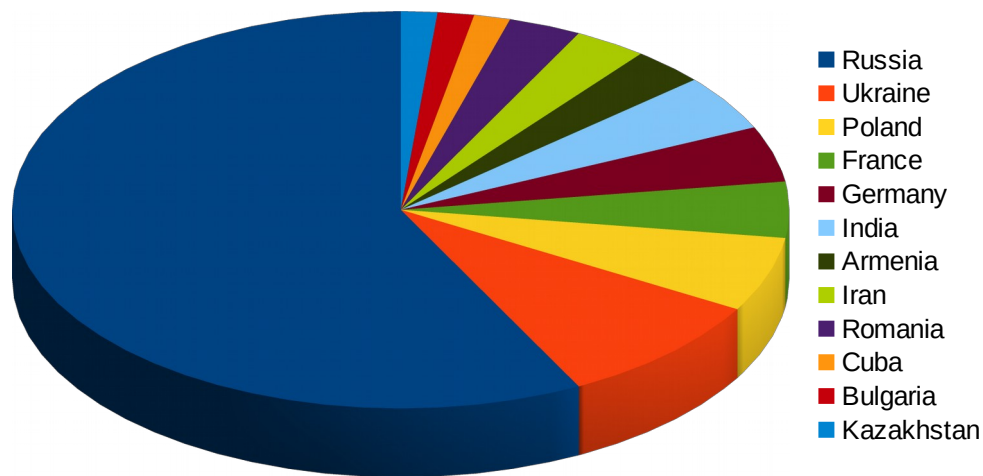
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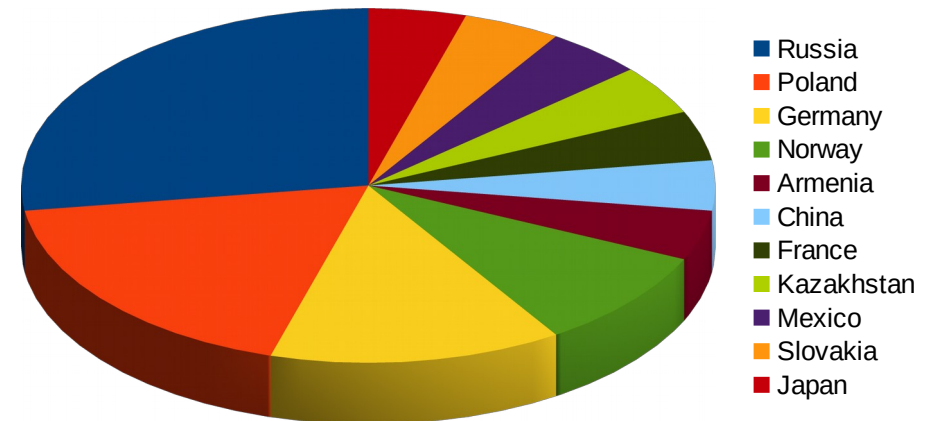
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Statistics for Matter under Extreme Conditions in HIC & Astro 2019



Participants – 66, Countries – 12



Lecturers – 22, Countries – 11

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Dubna International Advanced School of Theoretical Physics / DIAS-TH

Program (first week)

Time/Date	Monday 20.08.	Tuesday 21.08.	Wednesday 22.08.	Thursday 23.08.	Friday 24.08.
9:30 - 10:30	Registration (9:00-10:00) Opening (10:00)	Kojo	Senger	Rezzolla	Huovinen
10:30-11:00	Coffee break				
11:00-12:00	Senger	Huovinen	Huovinen	Rezzolla	Rezzolla
12:00-13:00	Kabana	Teryaev	Kolomeitsev	Sorin	Abdikamalov
13:00-15:00	Lunch break				
15:00-16:00	Taranenko	Taranenko	Lo	Lab	Lo
16:00-16:30	Coffee break			Excursion NICA	Coffee break
16:30-17:30	Alvarez-Castillo	Kolomeitsev	Abdikamalov		Blaschke
18:00-19:00	Student contributions / Exercises				

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Time/Date	Monday 20.08.	Tuesday 21.08.	Wednesday 22.08.	Thursday 23.08.	Friday 24.08.
9:30 - 10:30	Registration (9:00-10:00) Opening (10:00)			Rezzolla	Huovinen
10:30-11:00					
11:00-12:00	Senger				
12:00-13:00	Kabana	...			
13:00-15:00			Lu		
15:00-16:00	Taranenko	Taranenko			
16:00-16:30			Coffee break		
16:30-17:30	Alvarez Castillo	Kolomeitsev			
18:00-19:00			Student cont		

TODAY:
Get-Together at the
Volga Beach !!

Follow
Niels-Uwe Bastian &
Elizaveta Nazarova



Bogoliubov Laboratory of Theoretical
Joint Institute for Nuclear Research,

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Program (second week)

Time/Date	Monday 27.08.	Tuesday 28.08.	Wednesday 29.08.	Thursday 30.08.	Friday 31.08.
9:30 - 10:30	Kojo	Bleicher	Bleicher	Grigorian	Bravina
10:30-11:00	Coffee break				
11:00-12:00	Zabrodin	Teryaev	Yasutake	Yasutake	Grigorian
12:00-13:00	Lo	Rogachevsky	Blaschke	Jankowski	Shipilov (30') Closing
13:00-15:00	Lunch break				
15:00-16:00	Jankowski	Yasutake	Lab. Excursion Superheavy & Theory	Kojo	Falling Walls Lab Dubna 18
16:00-16:30	Coffee break				
16:30-17:30	Blaschke	Zabrodin	Jankowski	Voskresensky	
18:00-19:00	Student contributions / Exercises				

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The School is opened -



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The School is opened -

Enjoy **Your Summer School !**

Bogoliubov Laboratory of Theoretical Physics,
Joint Institute for Nuclear Research, August 20-31, 2018



- 1 – Hotel “Dubna”**
- 2 – House of International Meetings**
- 5 – Hotel “Grill”**
- 7 – Restaurant “Old Armenia”**
- 8 – Visit Centre, Falling Walls Lab 31.08., 15:00**
- 9 – JINR Labs: BLTP, FLNR, LIT, FLNP, DLNP, LRB**
- 10 – Railway station “Dubna”; Express train to Moscow**