

**DIAS-TH: Dubna International Advanced School of Theoretical Physics
Helmholtz International Summer School
NUCLEAR THEORY AND
ASTROPHYSICAL APPLICATIONS**

BLTP JINR, Dubna, Russia, July 21 - August 1, 2014



TOPICS:

- nuclear structure and reactions
- neutrinoless double β -decay
- superfluidity in nuclei and neutron stars
- terrestrial experiments for astrophysics
- neutrino interactions with nuclei / nuclear matter and supernovae
- condensation and phase transitions in dense matter

ORGANIZERS:

J. Margueron (IPN, Lyon)
G. Martínez-Pinedo (TU, Darmstadt)
V. Voronov (JINR, Dubna)

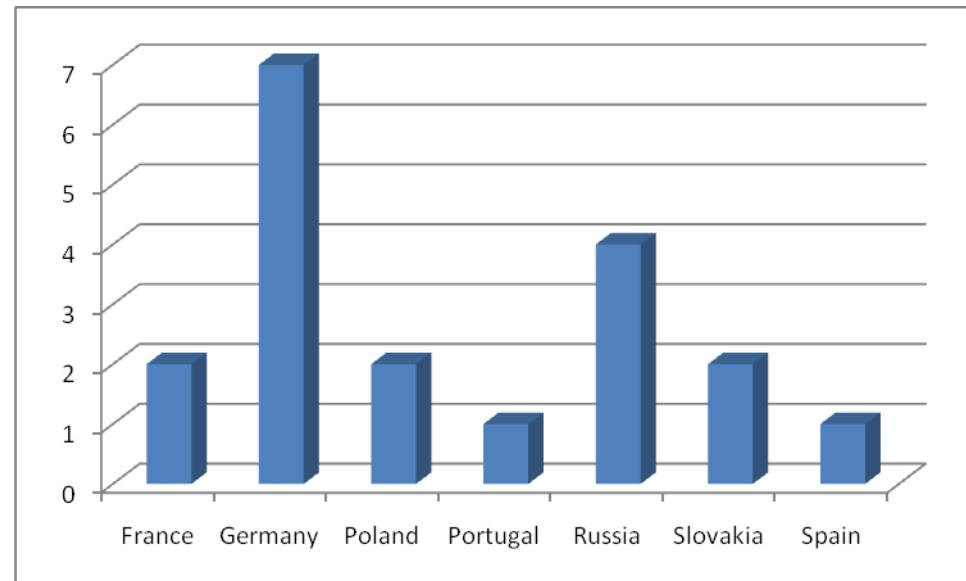
ORGANIZING COMMITTEE:

N. Arsenyev, Scientific secretary (JINR)
V. Novikova, Secretary (JINR)
A. Andreev (JINR)
A. Bezbakh (JINR)
D. Blaschke (JINR&U. Wroclaw)
V. Sargsyan (JINR)
A. Vdovin (JINR)

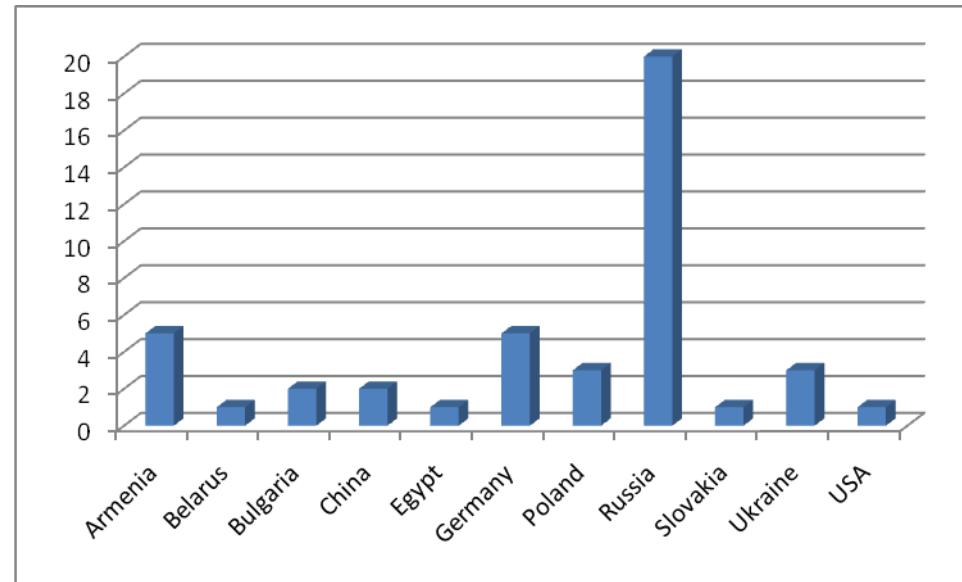
CONTACT ADDRESS:

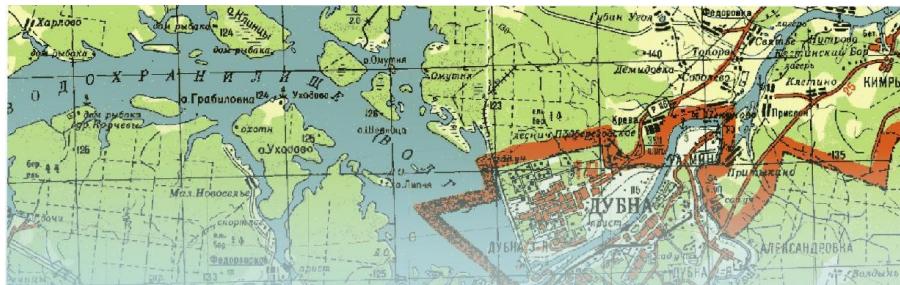
Prof. V. Voronov
Bogoliubov Laboratory of Theoretical Physics
Joint Institute for Nuclear Research
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Countries	Lecturers
France	2
Germany	7
Poland	2
Portugal	1
Russia	4
Slovakia	2
Spain	1
Total	19



Countries	Students
Armenia	5
Belarus	1
Bulgaria	2
China	2
Egypt	1
Germany	5
Poland	3
Russia	20
Slovakia	1
Ukraine	3
USA	1
Total	44





Bogoliubov Laboratory of Theoretical Physics, Joint Institute for Nuclear Research

Dubna International Advanced School of Theoretical Physics

Helmholtz International Summer School

Dubna, Russia, August 25-September 6 , 2014

Lattice QCD, Hadron Structure and Hadronic Matter

SCIENTIFIC PROGRAM:

- Introduction to lattice gauge theory
- Hadron structure and spectroscopy
- Non-zero temperature and baryon number density
- Chiral perturbation theory
- External field effects
- Lattice gauge theory and nuclear theory
- Non-QCD applications of lattice gauge theory
- Simulation algorithms

ORGANIZERS:

- Owe Philipsen (Inst. for Theoretical Physics, Goethe Univ. Frankfurt)
- Ernst-Michael Ilgenfritz (VBLHEP and BLTP, JINR Dubna)
- Oleg Teryaev (JINR, Dubna)

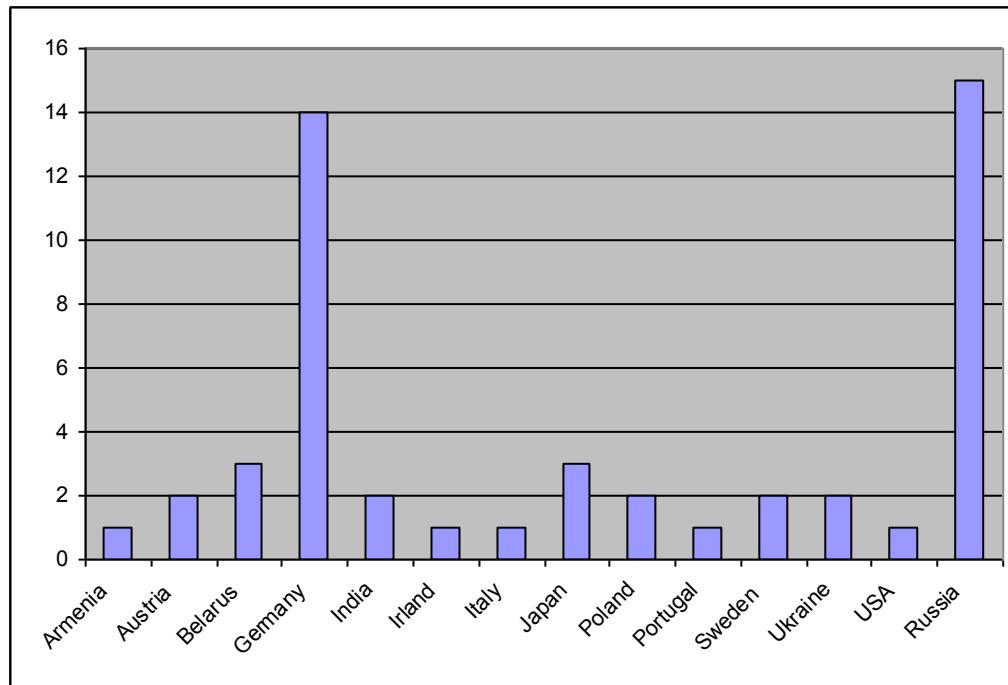
CONTACTS:

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141980 Dubna, Russia; Phone: (+749621) 65084; e-mail: diastp@theor.jinr.ru
<http://theor.jinr.ru/~diastp/summer14>



Students

Armenia – 1
Austria – 2
Belarus – 3
Germany – 14
India – 2
Ireland – 1
Italy – 1
Japan – 3
Poland – 2
Portugal – 1
Sweden -2
Ukraine – 2
USA – 1
Russia - 15
Total – 50



Lecturers

Germany – 10
Russia – 11
USA – 2

HELMHOLTZ INTERNATIONAL SUMMER SCHOOL

Dubna International Advanced School of Theoretical Physics / DIAS-TH

DENSE MATTER 2015

Bogoliubov Laboratory of Theoretical Physics,
Joint Institute for Nuclear Research, 29 June - 11 July

TOPICS

Equation of state & **QCD** phase transitions

Transport properties in dense **QCD** matter

Hadronization & freeze-out in heavy ion collisions (HIC)

Astrophysics of compact stars (CS)

Dense matter in strong electromagnetic fields

Simulations of dense **QCD**, HIC and CS

Experiments and observational programs

ORGANIZERS

D. Blaschke (JINR Dubna & Univ. Wroclaw)

M. Bleicher (FIAS & Univ. Frankfurt)

A.T. Filippov (JINR Dubna)

B. Yu. Sharkov (FAIR Darmstadt & FRRC Moscow)

A.S. Sorin (JINR Dubna)

CONTACTS

BLTP JINR

141980 Dubna, Russia

<http://theor.jinr.ru/~diastp/dm15>

e-mail: diastp@theor.jinr.ru

Local Organizing Committee

E. A. Davydov (BLTP JINR)

A. V. Friesen (BLTP JINR)

A. S. Khvorostukhin (BLTP JINR)

E. A. Kolganova (BLTP JINR)

O. M. Korotchik (JINR)- secretary

I. G. Pirozhenko (BLTP JINR)

O. V. Teryaev (BLTP JINR)

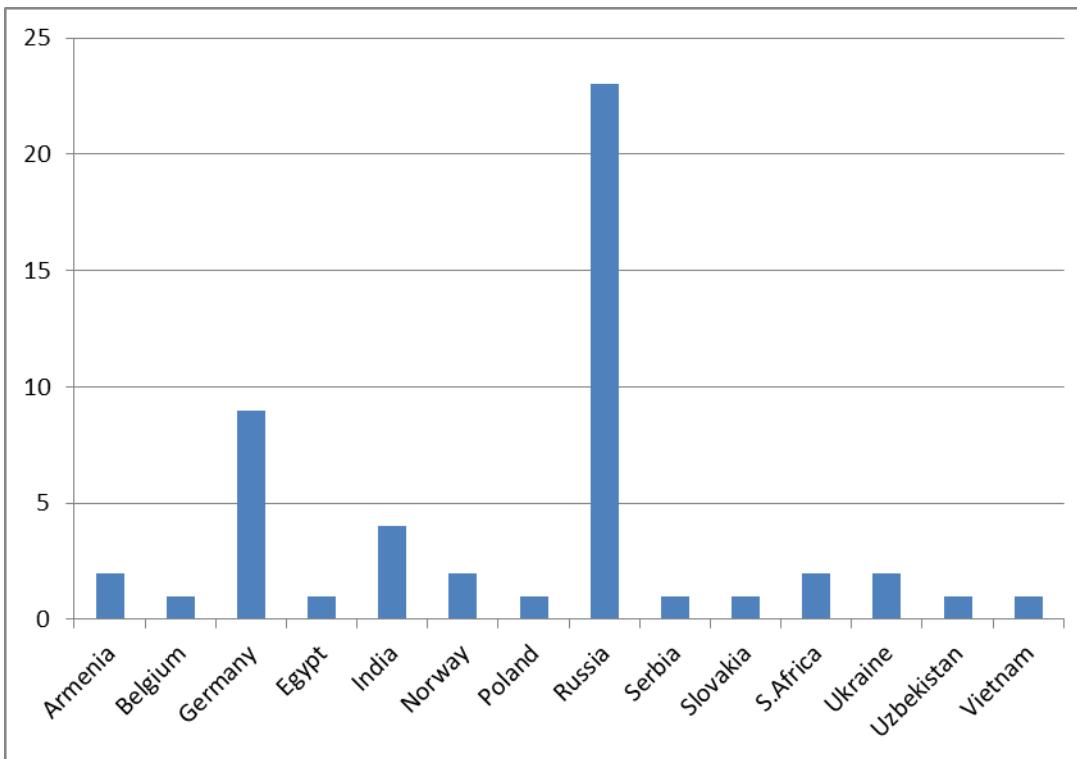
P. V. Tretyakov (BLTP JINR)

V. I. Zhuravlev (BLTP JINR)

Satellite School of SQM 2015 Conference



Students 51



Lecturers 13

France	1
Germany	3
Italy	1
Japan	1
Slovakia	1
S. Africa	1
Sweden	1
Switzerland	1
USA	3

Helmholtz International Summer School – HISS
Dubna International Advanced School of Theoretical Physics – DIAS TH

Theory challenges for LHC physics

July 20 – 30, 2015, Dubna, Russia

Lectures:

- Michelangelo Mangano (CERN)
“Introduction to hadron collider physics”
Stefan Gieseke (KIT)
“QCD for colliders”
Simon Badger (CERN)
“QCD amplitudes at NLO and beyond”
Thorsten Ohl (Wuerzburg Uni.)
“Computational techniques for the LHC”
Rutger Boels (DESY)
“Modern computational methods
for scattering amplitudes”
Michael Spannowsky (Durham Uni.)
“Higgs physics”
Thomas Mannel (Siegen Uni.)
“Flavour physics”
Alexander Belyaev (Southampton Uni.)
“Beyond the Standard Model”
Joachim Mnich (DESY, Hamburg)
“Future colliders”
Thomas Hahn (MPI Munich)
“Symbolic Programming in HEP”
Alexander Eremin (JINR)
“Heavy Elements and Island of Stability”
Grigory Trubnikov (JINR, Dubna)
“NICA project at JINR”

Program Committee

- D.Bardin (JINR)
E.Boos (SINP MSU)
T.Hahn (Munich)
D.Kazakov (JINR)
K.Melnikov (KIT)
S.Moch (DESY, Zeuthen)
J.Reuter (DESY)

Organizing Committee

- D.Kazakov (JINR) - chairman
A.Bednyakov (JINR) - sci secretary
N.Dokalenko (JINR) - secretary
A.Arbuzov (JINR)
A.Gladyshev(JINR)
L.Kalinovskaya (JINR)
I.Riemann (DESY, Zeuthen)
A.Sapronov (JINR)
J.Schmelzer (Rostok & JINR)

Contacts:

- Dr. Alexander Bednyakov
calc2015@theor.jinr.ru
Visas, hotel, transportation
Natalia Dokalenko
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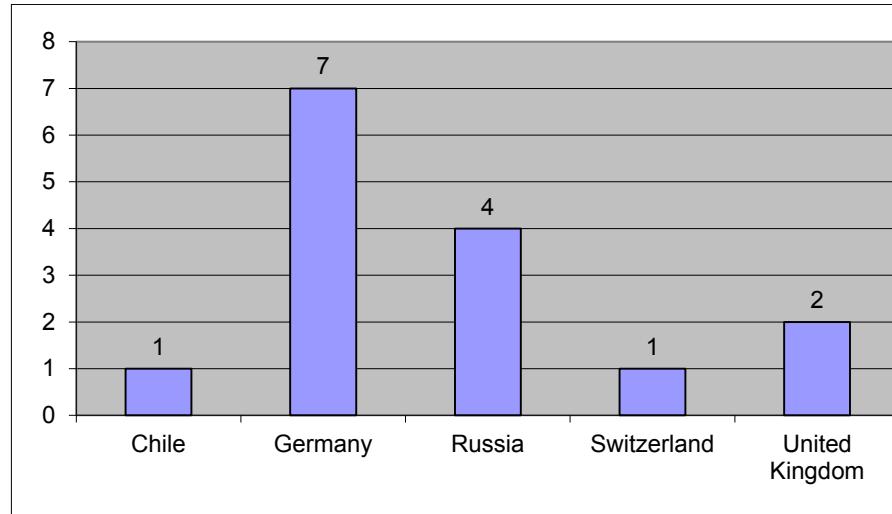
Workshop “Calculations for Modern and Future Colliders”

July 23 – 30, 2015

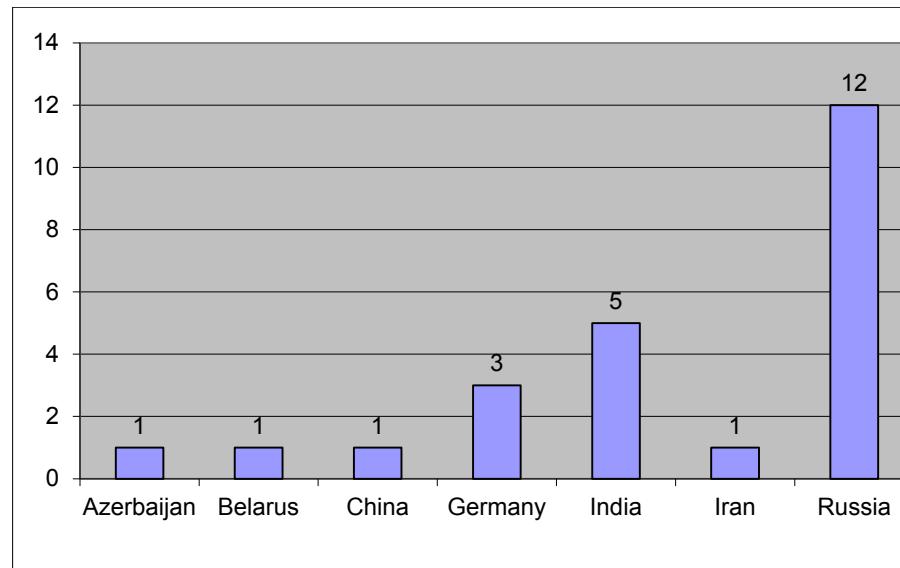
- Topics:
- Precision theoretical calculations for experiments at the LHC
 - Methods of multiloop calculations and resummation
 - Computer codes for calculations in HEP
 - Theoretical predictions beyond the Standard Model
 - Modern computational methods for scattering amplitudes

<http://theor.jinr.ru/~calc2015>

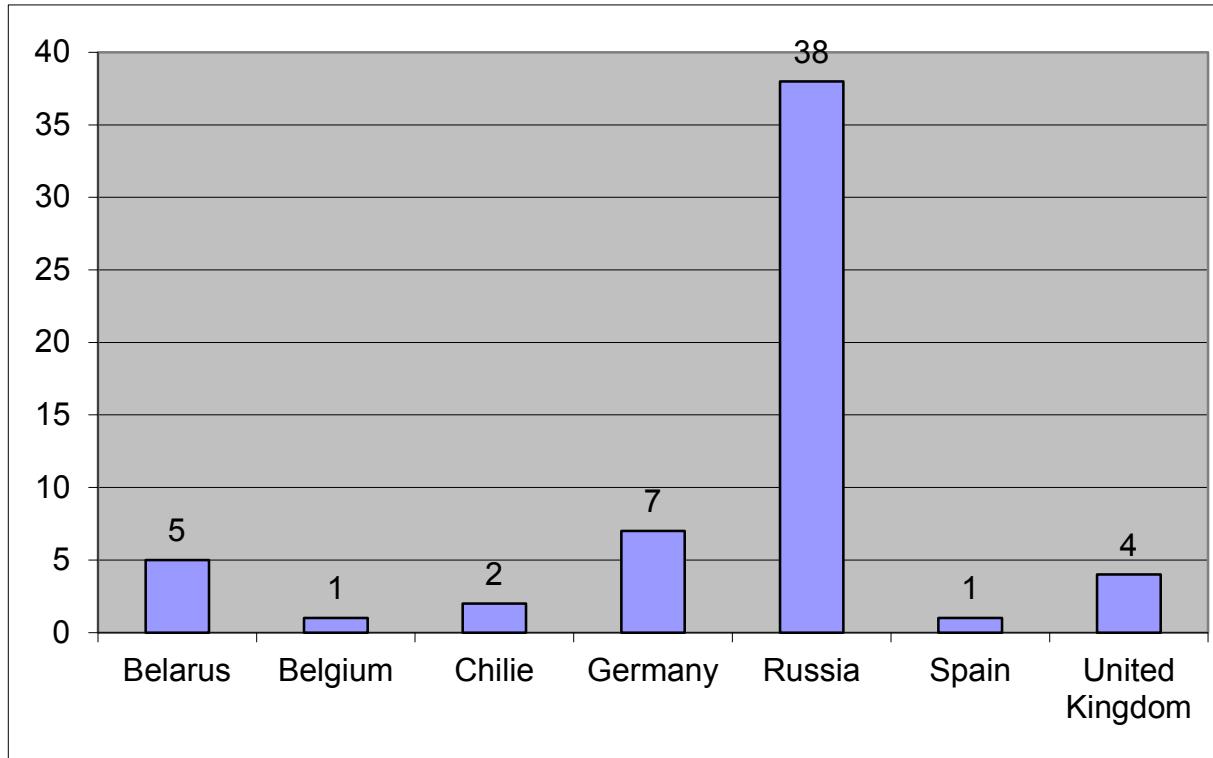
LECTURERS 15



STUDENTS 25



WORKSHOP PARTICIPANTS 58



Helmholtz International Summer School - HISS
Dubna International Advanced School of Theoretical Physics - DIAS TH

***Quantum Field Theory at the Limits:
from Strong Fields to Heavy Quarks***

BLTP, JINR, Dubna, Russia

July 18-30, 2016

TOPICS:

- Flavor physics and CP-violation
- Beyond the Standard Model
- Effective theories and models
in heavy quark physics
- b-hadrons and their decays
- Top quark physics
- XYZ states
- Strong-field QED
- High-intensity plasma physics

Website: <http://indico-new.jinr.ru/event/hq2016>

Contact email: hq2016@theor.jinr.ru

Organizers:

- A. Ali (DESY)
- D. Blaschke (JINR, Uni Wroclaw)
- H. Gies (HI Jena)
- M. A. Ivanov (JINR)

Local organizers:

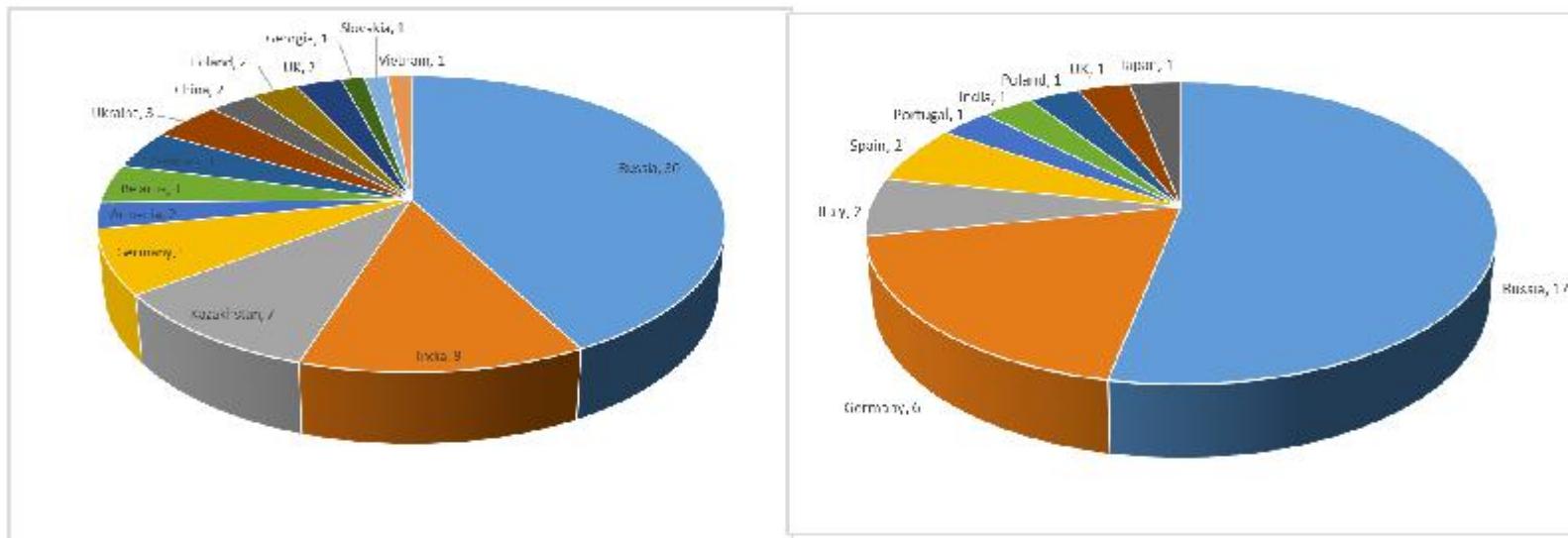
- Yu. Bystritskiy (JINR)
- A. Issadykov (JINR)
- A. Khvorostukhin (JINR)
- V. Novikova (JINR)
- I. Pirozhenko (JINR)
- J. Schmelzer (Rostock Uni. & JINR)
- V. Zhuravlev (JINR)



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Dubna International Advanced School of Theoretical Physics / DIAS-TH

Statistics for Quantum Field Theory at the Limits 2016



Bogoliubov Laboratory of Theoretical Physics,
Joint Institute for Nuclear Research, July 18-30, 2016

DUBNA INTERNATIONAL ADVANCED SCHOOL OF THEORETICAL PHYSICS

Helmholtz International Summer School

Cosmology Strings

HELMHOLTZ
GEMEINSCHAFT

DESY

HZDR

KIT

Russian Federal Institute of Nuclear Physics

JOINT INSTITUTE FOR NUCLEAR RESEARCH

Bogoliubov Laboratory of
Theoretical Physics

New Physics

August 28-September 10, 2016
Dubna, Russia

Topics

Advances in supersymmetric gauge theories
Higher spin theories
Gravity, (super)symmetry, integrability
Status of new physics at LHC
Cosmology and high energy physics
Inflationary cosmology and alternatives
Dark energy and modified gravity

Organizers

A.Filippov (JINR), F.R.Klinkhamer (KIT Karlsruhe)
V.A.Rubakov (INR Moscow), V.Schomerus (Desy Hamburg)
A.A.Starobinsky (Landau Inst & JINR)

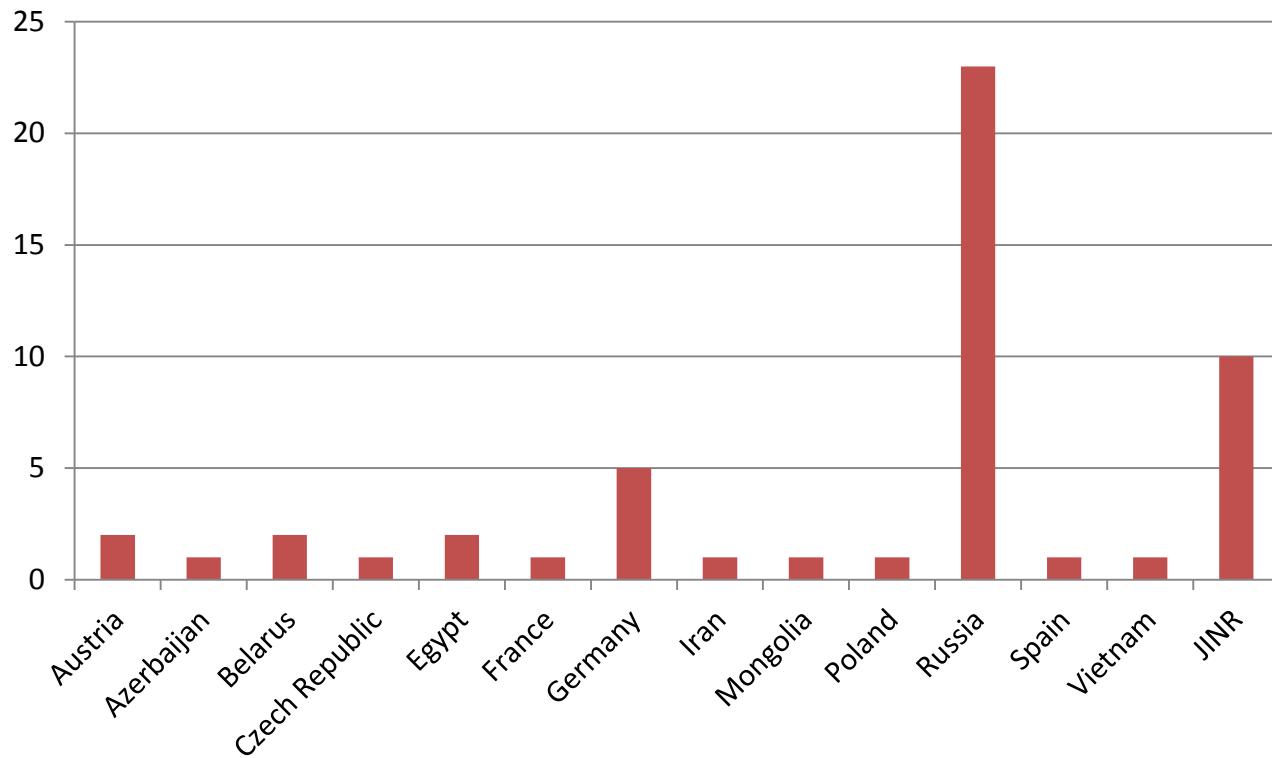


Contact

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Students (52)



Lecturers (18)

Austria 1
Germany 3
Russia 8
JINR 6