



**SCIENCE
OF THE
FUTURE**

RUSSIA
ST. PETERSBURG
17-20 SEPTEMBER
2014



CONFERENCE PROGRAM



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ABOUT THE CONFERENCE

The conference «Science of the Future» will provide a platform for the exchange of information within the scientific community, the development of international cooperation, integration of Russia into the world scientific environment.

The conference will highlight the experience and results of scientific research carried out under the guidance of the leading world scientists in Russian universities and research organizations. The conference will bring together leading scientists, implementing projects in the framework of the decree of the Government of the Russian Federation from April 9, 2010 № 220 «On measures to attract leading scientists in the Russian educational institution of higher professional education and scientific institutions of the state academies of Sciences and state research centers of the Russian Federation».

Leading scientists will share their experience of research carried out with the support of the Ministry of education and science of the Russian Federation, and also will tell about the results of their work.

The conference will include plenary meetings, poster sessions, popular science lectures by leading scientists. The work at the conference will be carried out in the following sections:

- Life Sciences
- Mathematics
- Computer Technologies
- Mechanics and Engineering. Energy
- Physics. Nanotechnologies. Materials Technology. Space
- Earth Sciences
- Chemistry
- Humanities

Also at the conference there will be held the all-Russian youth scientific conference and the exhibition of innovative projects of young scientists, where the participants will be able to present their developments, to participate in scientific seminars, listen to lectures of leading scientists, to communicate with the world experts, representatives of public authorities, to get acquainted with the leading laboratories, established in St. Petersburg in the framework of implementation of resolution no. 220.»

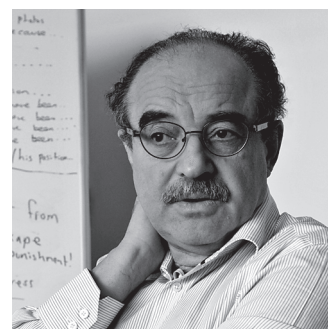
PROGRAM COMMITTEE OF CONFERENCE



Alexander V. KABANOV
Chairman of Program committee
Ph.D., Dr.Sc. UNC Eshelman
School of Pharmacy, Carolina
Institute for Nanomedicine, USA.



Alexei V. KAVOKIN
Co-chairman of Program committee
Ph.D. in Physics, Professor.
Head of Department
of Nanophysics and Photonics
(University of Southampton)



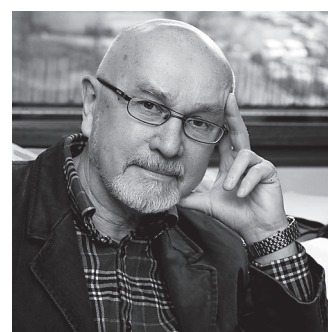
Boris D. ZHIVOTOVSKY
Sc.D., Professor.
Karolinska Institute, Sweden.
Professor (Lomonosov Moscow
State University, Russia)



Sergei A. NIKITOV
Dsc in Mathematics, Professor,
Corresponding member of the
Russian Academy of Sciences
Institute of Radioengineering and
Electronics of the Russian...



Iskander S. AKHATOV
Dr. Sc. in Physics and Mathematics,
Professor Skolkovo Institute
of Science and Technology, Russia
North Dakota State University, USA



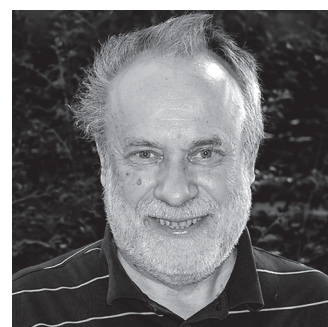
Sergei S. ZILITINKEVICH
ScD in physics and mathematics.
Finnish Meteorological Institute,
University of Helsinki, Finland



Vladimir G. SPOKOINY
Chairman of section
Ph.D. in Mathematics.
Humboldt University of Berlin,
Institute Weierstrass, Germany



Dmitry A. Funk
Chairman of section
ScD in History, professor.
Institute of Ethnology and
Anthropology of the Russian
Academy of Sciences, Russia



Yuri M. KABANOV
ScD in mathematics, professor.
University Franche-Comte, France,
National Research University «High
School of Economics», Russia

PROGRAM COMMITTEE OF CONFERENCE

LIFE SCIENCES

Zhivotovsky Boris Davidovich

Chairman of section

Dr. Sc., professor.

Karolinska Institute, Sweden. Professor
(Lomonosov Moscow State University,
Russia)

Chumakov Petr Mikhailovich

ScD, professor.

Institute of Molecular Biology of the
Russian Academy of Sciences, Russia

Macchiarini Paolo

Doctor of medicine, Ph.D. Karolinska
Institute, Sweden

OBrien Stephen James

PhD in Genetics.

National Institutes of Health, USA

Melino Gennaro

Doctor of medicine, Ph.D.

University «Tor Vergata», Italy

Vitkin Alex

Medical biophysicist, Professor.
University of Toronto, Canada

Bezprozvanny Ilya Borisovich

hD, DSci in Cell Biology, professor,
Saint-Petersburg State Polytechnical
University, Russia

COMPUTER TECHNOLOGIES

Spokoiny Vladimir Grigorievich

Chairman of section

Ph.D. in Mathematics.

Humboldt University of Berlin, Institute
Weierstrass, Germany

**Pardalos Panayote (Panos)
Miltiade**

Professor Emeritus.

University of Florida, USA

Klimentov Alexei Anatolyevich

PhD in Mathematics.

Brookhaven National Laboratory, USA

MATHEMATICS

Kabanov Yuri Mikhailovich

Chairman of section

ScD in mathematics, professor.

University Franche-Comte, France,
National Research University "High
School of Economics", Russia...

Touraev Vladimir Georgievich

Dr. Sc.

Indiana University, USA

Mechanics. Engineering. Energy

MECHANICS. ENGINEERING. ENERGY

Akhatov Iskander Shaukatovich

Chairman of section

Dr. Sc. in Physics and Mathematics,
Professor Skolkovo Institute of Science
and Technology, Russia
North Dakota State...

Vinogradov Alexey Urievich

PhD, candidate of physical
and mathematical sciences.

Togliatti State University, Russia

Styczynski Zbigniew Antoni

ScD in Engineering.

Otto von Guericke University, Germany

**Utyuzhnikov Sergey
Vladimirovich**

Dr. Sc., professor.

University of Manchester, UK

Smurov Igor Yurievich

Phd in Mathematics, professor.

National Engineering School
of Saint-Étienne, France

Valiev Ruslan Zufarovich

ScD in Physics and Mathematics,
professor Ufa State Aviation Technical
University, Russia

Isaev Sergey Alexandrovich

ScD in Physics and Mathematics,
professor.

Saint Petersburg State University
of Civil Aviation, Russia

Tsiakaras Panagiotis

Ph.D., professor.

University of Thessaly, Greece

CHEMISTRY

Kabanov Alexander Viktorovich

Chairman of section
Ph.D., Dr.Sc.
Director (Center for Nanotechnology in Drug Delivery), Mescal S. Ferguson Distinguished Professor (UNC Eshelman School...

Kharton Vladislav Vadimovich

Ph.D in Chemistry.
Institute of Solid State Physics of the Russian Academy of Sciences, Russia

Bahnemann Detlef Werner

Leibniz University of Hannover, Germany

PHYSICS. NANOTECHNOLOGIES. MATERIALS TECHNOLOGY. SPACE

Nikitov Sergey Apollonovich

Chairman of section
ScD in Mathematics, professor, corresponding member of the Russian Academy of Sciences.
Institute of Radioengineering and Electronics...

Estrin Juri Zakharovich

PhD in Mathematics, ScD, Honorary doctor of sciences.
Monash University, Australia

Luque Antonio Ignacio

Ph.D., professor.
Technical University of Madrid, Spain

Wagner Friedrich

ScD.
Institute of Plasma Physics Max Planck Society, Germany

Samsonov Vladimir Mikhailovich

ScD in Physics and Mathematics.
Saint-Petersburg Institute of Nuclear Physics, Russia

Kenny Jose Maria

Ph.D. in chemical engineering, full professor. University of Perugia, Italy

Lamberti Carlo

Ph.D. in physics.
Turin University, Italy

Nabiev Igor Roufailovich

ScD in Chemistry, 1 Class Professor.
University of Reims, France

Romanov Alexey Evgenyevich

ScD in Mathematics.
Ioffe Physical Technical Institute of the Russian Academy of Sciences, Russia

Kimel Alexey Voldemarovich

PhD in Mathematics.
Radboud University Nijmegen, Netherlands

EARTH SCIENCES

Zilitinkevich Sergej Sergeevich

Chairman of section
ScD in physics and mathematics.
Finnish Meteorological Institute, University of Helsinki, Finland

Moiseenko Tatyana Ivanovna

ScD, professor, corresponding member of the Russian Academy of Sciences).
V.I. Vernadsky Institute of Geochemistry and Analytical Chemistry of the...

Kurths Juergen Herbert Gustav

Professor.
Potsdam Institute for Climate Impact Research, Germany

Koltermann Klaus Peter

Ph.D., professor.
Head of the laboratory (Lomonosov Moscow State University, Russia)

Semiletov Igor Petrovich

ScD, professor.
University Alaska Fairbanks, USA,
V.I. Il'ichev Pacific oceanological Institute of the Far Eastern Branch of the Russian Academy...

Groisman Pavel Yakovlevich

Ph.D., professor.
National Climatic Data Center of the National Oceanic and Atmospheric Administration, USA

Chapron Bertrand

Ph.D. Institut Francais de Recherche pour l' Exploitation de la Mer, France

HUMANITIES

Funk Dmitry Anatolievich

Chairman of section
ScD in History, professor.
Institute of Ethnology and Anthropology of the Russian Academy of Sciences, Russia...

Kovas Julia Vladimirovna

Professor, Ph.D.
University of London, UK

Grigorenko Elena Leonidovna

PhD (psychology, genetics), Habilitation (psychology), Emily Fraser Beede Professor of developmental disabilities.
Yale Academic Skills Clinic, USA

Weber Shlomo

Ph.D. in Mathematical Economics.
Southern Methodist University, USA

Casati Fabio

PhD. University of Trento, Italy

THE ORGANIZING COMMITTEE

Dmitry V. Livanov

The Minister of education and science of the Russian Federation (The Chair of the Committee)

Lyudmila M. Ogorodova

The Deputy Minister of education and science of the RF (The Deputy Chairman of the Committee)

Irina K. Mekhryakova

The Leading adviser of the Department of science and technology of the Ministry of education and science of the RF

Inna P. Belenkina

Head of the presidential administration of the Russian Federation on scientific and educational policy

Jores I. Alferov

The Rector of the Russian Academy of Sciences St. Petersburg Academic University - scientific-educational center of nanotechnology RAS

Vladimir N. Vasiliyev

The rector of Federal state Autonomous educational institution of higher education «Saint-Petersburg national research University of information technologies, mechanics and optics»

Sergey V. Kalyuzhny

Advisor to the Chairman of the Board on science, chief scientist of «RUSNANO» JSC

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Director General of «Inconsult K» LLC

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The Rector of The St. Petersburg state University

Andrei I. Rudskoi

The Rector of The St. Petersburg state Polytechnic University

Sergey V. Salikhov

Director of the Department of science and technologies of the Ministry of education and science of the RF

Staniskav K. Smirnov

Scientific supervisor of the laboratory named after P.L.Chebyshev of the St.-Petersburg state University

Alexei R. Khokhlov

The pro-rector of the Moscow state University named after M.V. Lomonosov, Chairman of the science Board at the Ministry of education and science

REGIONAL ORGANIZING COMMITTEE

Alexander O. Ladni

Chairman

Deputy Director of the Department of science and technology, Ministry of education and science of Russia

Alexander V. Babkin

Deputy Director of the Department of scientific-organizational activities of SPSTU

Georgi G. Gogoberidze

Pro-rector of RSHU for Educational and methodical Association of universities of the Russian Federation by education in the field of Hydrometeorology

Alexei A. Zavarzin

Pro-rector, press-secretary of SPSU

Irina V. Korotkova

Director General, «Inconsult K» LLC

Vladimir E. Marchenko

Advisor to the Rector of SPSU

Daria Y. Mironova

The Head of the department of scientific-educational marketing research of ITMO

Vladimir O. Nikiforov

Pro-rector on scientific work of ITMO

Dmitri Y. Reitchuk

Prorector on scientific work of SPSPU

Eugenia V. Sinepol

Leading expert of the Public Relations Department of SPSU

Olga V. Suryadnova

Leading expert, «Inconsult K» LLC

Leila A. Trasinova

Director General, «MariaRosa» LLC

Sergei P. Tunik

Pro-rector on scientific work SPSU

INVITED SPEAKERS



Julia V. Kovas
Professor, Ph.D.,
University of London,
UK



Stanislav K. Smirnov Ph.D.,
Professor University
of Geneva,
Switzerland



Paolo Macchiarini
Doctor of medicine,
Ph.D., Head of Center
for Regenerative
Medicine ACTREM,
Sweden



Iskander S. Akhatov
Dr. Sc. in Physics
and Mathematics,
Professor Skolkovo
Institute of Science
and Technology,
Russia
North Dakota State
University, USA



Riccardo Valentini
Ph.D., Professor
of forest ecology
and sustainable
development (Tusii
University, Italy)

KEYNOTE SPEAKERS

Andrei Zvyagin
Candidate of Sciences

Konstantin Agladze
Candidate of Sciences

Detlef Bahnemann
...

Ilya Bezprozvanny
Doctor of Sciences

James Butler
Ph.D.

Bertrand Chapron
Doctor of Sciences

Boris Chichkov
Doctor of Sciences

Anatoly Derevianko
Doctor of Sciences

Grigori Enikolopov
Ph.D.

Yuri Estrin
Candidate of Sciences

Valery Fokin
Doctor of Sciences

Alexander Golubov
Doctor of Sciences

Pavel Groisman
Doctor of Sciences

Georg Guggenberger
Doctor of Sciences

Yurii Gunko
Candidate of Sciences

Igor Abrikosov
Doctor of Sciences

Sergey Isaev
Doctor of Sciences

Dimitri Ivanov
Candidate of Sciences

Julien Fuchs
Doctor of Science

Yuri Kabanov
Doctor of Sciences

Yoshiyuki Kawazoe
Doctor of Science

Peter Kazansky
Candidate of Sciences

Jose Kenny
Ph.D. in chemical
engineering

Rustem Khazipov
Doctor of Sciences

Alexey Kimel
Candidate of Sciences

Alexei Klimentov
Candidate of Sciences

Alexey Kondrashov
Candidate of Sciences

Vladimir Krasnopolsky
Doctor of Sciences

Konstantin Krutovsky
Candidate of Sciences

Juergen Kurths
Doctor habilitation

Ari Laptev
Doctor of Science

John Lemasters
M.D., Ph.D.

Vladimir Malakhov
Doctor of Sciences

Mario Biagioli
Ph.D.

Seamus Martin
Ph.D.

Kaoru Maruta
Ph.D. in Engineering

Igor Nabiev
Doctor of Sciences

Juergen Oberst
Ph.D.

Stephen James O'Brien
Ph.D.

Artem Oganov
Doctor of Sciences

Eiji Ohtani
Doctor of Science

Alexander Poltorak
Doctor of Sciences

Alexander Pukhov
Candidate of Sciences

Evgeny Rogaev
Doctor of Sciences

Alexey Romanov
Doctor of Sciences

Michael Schmidt
Ph.D.

Igor Semiletov
Doctor of Sciences

Vladimir Spokoinyi
Candidate of Sciences

Sergei K. Turitsyn
Doctor of Sciences

Ken-ichi Ueda
Ph.D.

Sergey Utyuzhnikov
Doctor of Sciences

Alex Vitkin
Ph.D. in Medicine

Sergej Zilitinkevich
Doctor of Sciences

**Teunis Martien
Klapwijk**

Stanislav Smirnov
Ph.D.

**Ramon Torrecillas
Sanmillan**
Doctor of Science

Boris Zhivotovsky
Doctor of Sciences

Andrei Agrachev
Doctor of Sciences

Iskander Akhatov
Doctor of Sciences

George Barakos
Ph.D.

David Zeke Besson
Ph.D.

Fabio Casati
Ph.D.

Peter Chumakov
Doctor of Sciences

Sergei Danilov
Doctor of Sciences

Alexander Dityatev
Candidate of Sciences

Alexander Dolgov
Doctor of Sciences

Fedor Fomin
Candidate of Sciences

Dmitri Funk
Doctor of Sciences

Maurizio Gatti
Ph.D.

Elena Grigorenko
Ph.D. in psychology,
genetics

Alexander Kabanov
Doctor of Sciences

Alexey Kavokin
Candidate of Sciences

Vladislav Kharton
Candidate of Sciences

Peter Klaus Koltermann
Ph.D.

Yulia Kovas
Ph.D.

Hans-Michael Kroening
Doctor of Science

Leonid Kuzmin
Doctor of Sciences

Carlo Lamberti
Ph.D. in physics

Evgeny Lomakin
Doctor of Sciences

Sergei A. Lukyanov
Doctor of Sciences

Antonio Luque
Ph.D.

Paolo Macchiarini
Doctor of medicine, Ph.D.

Gennaro Melino
Doctor of medicine, Ph.D.

Razmik Mirzoyan
Candidate of Sciences

Tatiana Moiseenko
Doctor of Sciences

Dmitry Murzin
Doctor of Sciences

Sergei Nedospasov
Doctor of Sciences

Sergei Nikitov
Doctor of Sciences

Evgeny Nudler
Ph.D.

**Alberto Maria Felice
Paleari**
Ph.D. in Physics

Panos M. Pardalos
Professor Emeritus

Pavel Pevzner
Candidate of Sciences

Oleg Pokrovsky
Candidate of Sciences

Davide Maria Proserpio
Doctor of Sciences

Marie-Pierre Rey
Doctor of Sciences

Oleg Rudenko
Doctor of Sciences

Vladimir Samsonov
Doctor of Sciences

Martin Schroder
Ph.D.

Igor Smurov
Candidate of Sciences

Anatoly Snigirev
Candidate of Sciences

Vasily Studitsky
Doctor of Sciences

**Zbigniew Antoni
Styczynski**
Doctor of Science

Gleb Sukhorukov
Candidate of Sciences

Alexander Tagantsev
Doctor of Sciences

Joern Thiede
Doctor of Science

**Jacques-Francois
Thisse**
Doctor of Economics

Panagiotis Tsiakaras
Ph.D.

Alexey Ustinov
Doctor of Sciences

Alexander Vainstein
Ph.D.

Riccardo Valentini
Doctor of Science

Ruslan Valiev
Doctor of Sciences

Alexei Vinogradov
Candidate of Sciences

Friedrich Wagner
Doctor of Science

Shlomo Weber
Ph.D. in Mathematical
Economics

Vladimir Zakharov
Doctor of Sciences

Petrus Sloot
Ph.D.

INTERNATIONAL SCIENTIFIC CONFERENCE «SCIENCE OF THE FUTURE» OVERVIEW

September 16

Guests Arrival. Check in at the hotels.

September 17

8.30	Departure from the hotel (by bus)	
10:00 – 11:00	Conference opening ceremony	Manege of the First Cadet Corps (Universitetskaja naberezhnaja, 13)
11:00 – 11:30	Coffee break	
11:30 – 14:00	Plenary meeting <i>Moderator: Kabanov V. Alexander</i> <i>Speakers:</i> Kovas V. Julia , Professor, Ph.D. University of London, UK «How can education benefit from genetics and neuroscience?» Smirnov K. Stanislav , Ph.D., Professor (University of Geneva, Switzerland) «Recent progress in 2D statistical physics» Paolo Macchiarini , Doctor of medicine, Ph.D., Head of Center for Regenerative Medicine ACTREM (Karolinska Institute, Sweden) «Regenerative medicine in general with particular attention to Russia» Iskander S. Akhatov , Dr. Sc. in Physics and Mathematics, Professor of Mechanical Engineering (North Dakota State University, USA) «Fluid Dynamics of Dispersed Systems: Fundamentals and Applications to Oil and Gas Industry» Riccardo Valentini , Ph.D., Professor of forest ecology and sustainable development (Tuscia University, Italy) «Environmental assessment and prospects of Russia agriculture development under conditions of Global climate and technological changes»	Manege of the First Cadet Corps (Universitetskaja naberezhnaja, 13)
14:00 – 15:00	Lunch	Assembly hall of Saint-Petersburg State University (Universitetskaja naberezhnaja, 7/9)
15:30 – 17:00	Poster Session	Corridor of the Saint-Petersburg State University (Universitetskaja naberezhnaja, 7/9)
17:00 – 19:00	The meeting of the Aide to the President of the Russian Federation Andrei A. Fursenko and the Minister of Education and science Dmitrij V. Livanov with the leading scientists	22 linija Vasilevskij Ostrov, 7, hall №1
17:00 – 19:00	An excursion to the laboratories – mega-grants winners. Presentation of the laboratories (upon prior registration) An excursion to the Optical museum of the National research University of information technologies, mechanics and optics	
19:30 – 22:00	Neva river boat trip (upon prior registration)	

September 18

8.30 – 10.00	Meeting of leading scientists with the General Director of the Russian Science Foundation Alexandr V. Hlunov (Breakfast)	Hotel «Astoria», Winter Garden
10:30 – 18:10	Section «Life Sciences»	Saint-Petersburg State University, Hall №1, 22 linija Vasilevskij Ostrov, 7
10:30 – 18:10	Section «Mathematics»	Saint-Petersburg State University, Hall №6, 22 linija Vasilevskij Ostrov, 7
10:30 – 17:00	Section «Chemistry»	Saint-Petersburg State University, Hall №2, 22 linija Vasilevskij Ostrov, 7
10:30 – 18:30	Section «Humanities»	Saint-Petersburg State University, lecture hall 3. 22 linija Vasilevskij Ostrov, 7
10.30 – 18.00	Section «Earth Sciences»	Saint-Petersburg State University, conference room №7, 22 linija Vasilevskij Ostrov, 7
10:30 – 18:30	Section «Computer Technologies»	ITMO University, Birzhevaja Linija Vasilevskij Ostrov, 4, conference room
10.30 – 18.00	Section «Mechanic. Engineering. Energy»	ITMO University, Birzhevaja linija Vasilevskij Ostrov, 14, auditorium 103.
11:00 – 18:30	Section «Physics, Nanotechnologies, Technologies of materials, Space»	SPbPU, Polytechnicheskaja ul., 29, the main building, 2nd floor, auditorium 232, 237
19:30 – 22:00	Ballet «The Sleeping Beauty»	Mikhailovsky Theatre

September 19

8:30	Departure from the hotels	
9:30 – 19:00	Section «Life Sciences»	Saint-Petersburg State University, Hall №1, 22 linija Vasilevskij Ostrov, 7
10:00 – 18:00	Section «Mathematics»	Saint-Petersburg State University, Hall №6, 22 linija Vasilevskij Ostrov, 7
10:30 – 17:00	Section «Chemistry»	Saint-Petersburg State University, Hall №2, 22 linija Vasilevskij Ostrov, 7
10:00 – 18:00	Section «Humanities»	Saint-Petersburg State University, lecture hall 3, 22 linija Vasilevskij Ostrov, 7
10:00 – 18:00	Section «Earth Sciences»	Saint-Petersburg State University, conference room №7, 22 linija Vasilevskij Ostrov, 7
10:00 – 17:00	Section «Computer Technologies»	ITMO University, Birzhavaja Linija Vasilevskij Ostrov, 4, conference room
10:30 – 18:00	Section «Mechanic. Engineering. Energy»	ITMO University, Birzhevaja linija Vasilevskij Ostrov, 14, auditorium 103.
9:30 – 19:00	Section «Physics, Nanotechnologies, Technologies of materials, Space»	SPbPU, Polytechnicheskaja ul., 29, the main building, 2nd floor, auditorium 232, 237

September 20

EXCURSIONS TO PETERHOF		EXCURSIONS TO THE LABORATORIES – MEGA-GRANTS WINNERS AT PETERHOF	
		10:00	Departure from the hotels (max. 130 visitors) (upon prior registration)
		11:00 – 14:00	A visit to the Science park of SpSU at Peterhof
12:00	Departure from the hotels	14:00	Departure from the Science park of Saint-Petersburg State University to Peterhof State Museum Reserve
13:00	Coming to Peterhof State Museum Reserve	14:15	Coming to Peterhof State Museum Reserve
13:30 – 16:30	Excursions «The Palace-and-Park Ensemble Peterhof»	14:30 – 16:30	Excursions «The Palace-and-Park Ensemble Peterhof»
16:30 – 17:00	Guests arrive in a tent		
17:00 – 20:30	Closing of the conference. Awarding of the winners of the youth conference.		
20:30 – 21:15	Fireworks. The ceremonial start of the fountain		
21:15	Departure		



SCIENCE
OF THE
FUTURE

SECTIONS

Life Science

September 18

St. Petersburg State University

Life Sciences

10.30–18.10 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairmen: Besprozvanny I. and Zhivotovsky B.			
10.30–10.55	25	Enikolopov Grigori Division and differentiation of adult neural stem cells	Moscow Institute of Physics and Technology (State University)
10.55–11.20	25	Zhivotovsky Boris D. Programmed cell death in Biology and Medicine	Lomonosov Moscow State University
11.20–11.45	25	Nudler Evgeny New Look at Transcription Coupled DNA Repair	Engelhardt Institute of Molecular Biology of the Russian Academy of Sciences
11.45–12.00	15	Grinyaev Mikhail Studying mechanisms of effects of feedback and transcranial electrical stimulation on learning using EEG and twin methods.	National Research Tomsk State University
12.00–12.25	25	Lukyanov Sergey Fluorescent proteins: new approaches to study mechanisms of physiological and pathological processes in live systems	Nizhni Novgorod State Medical Academy
12.25–12.50	COFFEE BREAKS		
12.50–13.15	25	Gatti Maurizio The mechanisms of kinetochore–driven MT formation in Drosophila	Institute of Molecular and Cellular Biology, Siberian Branch of the Russian Academy of Sciences
13.15–13.40	25	Dityatev Alexander Novel functions of the neural extracellular matrix	Lobachevsky State University of Nizhni Novgorod
13.40–13.55	15	Yakunina Maria Non–canonical multisubunit RNA polymerases encoded by the phiKZ phage	Saint-Petersburg State Polytechnic University
13.55–14.20	25	Vainstein Alexander Specialized metabolic pathways: hedonistic and medicinal applications	Shemyakin–Ovchinnikov Institute of Bioorganic Chemistry Russian Academy of Sciences (Pushino Department)
14.20–14.35	15	Alexandrov Dmitry Microbial communities and soil organic matter composition of the cryogenic larch forests of the Central Evenkia	Sukachev Institute of Forest, Siberian Branch of the Russian Academy of Sciences
14.35–14.50	15	Tembo Allan Greenhouse gas emissions from Chernozems with different land–use in the Central Chernozem state nature reserve named after Professor V.V. Alekhin	Russian State Agrarian University – Moscow Agricultural Academy named after K.A.Timiryazev
14.50–15.15	25	Krutovsky Konstantin V. Forest genetics and genomics development and federal funding of basic research in forestry in the Russian Federation: the government „megagrant“ program case	Siberian Federal University
15.15–16.15	LUNCH BREAKS		
Chairmen: Enikolopov G. and Melino G.			
16.15–16.40	25	Malahov Vladimir V. Revolution in zoology: New bilaterian phylogeny	Far Eastern Federal University
16.40–17.05	25	Chumakov Peter M. Oncolytic virus therapy: problems to be solved	Novosibirsk State University
17.05–17.30	25	Danilov Sergei M. Is ACE a new marker for atrial fibrillation?	Bakulev Center for Cardiovascular Surgery
17.30–17.55	25	Khazipov Rustem N. Early activity patterns in the developing sensory cortex	Kazan (Volga Region) Federal University
17.55–18.10	15	Presentation from Acta Nature	
18.10	CULTURAL EVENT		

September 19

St. Petersburg State University

Life Sciences

9.30–19.00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairmen: Chumakov P. and Vitkin A.			
9.30–9.45	15	Ponarin Eduard Happiness in Russia in comparative perspective	National Research University Higher School of Economics
9.45–10.10	25	Melino Gennaro p73, a members of the p53 family, in Cancer, Neuroscience and Senescence	Saint-Petersburg State Polytechnical University
10.10–10.25	15	Pyshnyi Dmitrii Oligonucleotide-based RNA-targeting antibacterial and antiviral therapeutics	Institute of Chemical Biology and Fundamental Medicine, Siberian Branch of the Russian Academy of Sciences
10.25–10.50	25	Bezprozvanny Ilya B. Neuronal calcium signaling and neurodegenerative disorders	Saint-Petersburg Polytechnical University
10.50–11.05	15	Semyachkina-Glushkovskaya O. Hemorrhagic stroke in newborns: obvious and incredible problem	Saratov State University
11.05–11.35	COFFEE BREAKS		
11.35–12.00	25	Nedospasov Sergei A. Reverse genetics and new approaches to anti-cytokine therapy	Lobachevsky State University of Nizhni Novgorod
12.00–12.25	25	Poltorak Alexander N. Inflammation and Death in Sepsis	Petrozavodsk State University
12.25–12.50	25	Agladze Konstantin Arrhythmia modelling in tissue culture	Moscow Institute of Physics and Technology (State University)
12.50–13.15	25	Lemasters John J. Drug Discovery Targeting Mitochondrial Pores and Channels for Cancer, Heart and Liver Diseases	Institute of Theoretical and Experimental Biophysics of the Russian Academy of Sciences
13.15–13.30	15	Lebedeva Anna Distribution of extracellular vesicles of different origin in patients with acute coronary syndromes	Moscow State University of Medicine and Dentistry
13.30–13.55	25	Martin Seamus J. Identification of Protease Inhibitors for the Treatment of Inflammatory Conditions such as Psoriasis	Saint-Petersburg State Institute of Technology
13.55–14.20	25	Vitkin Alex Improved optical diagnostics for medical imaging of biological tissue	Nizhny Novgorod State Medical Academy
14.20–15.30	LUNCH BREAKS		
Chairmen: Lukyanov S. and Pevzner P.			
15.30–15.45	15	Iliia V. Yampolsky Novel mechanism of bioluminescence: Siberian earthworms	Siberian Federal University
15.45–16.10	25	Zvyagin Andrei V. Luminescent nanocomplexes for theranostics	Lobachevsky State University of Nizhni Novgorod
16.10–16.25	15	E.D. Mishina Nonlinear-optical microscopy for imaging of functional nanomaterials	Moscow State Technical University of Radio Engineering, Electronics and Automation
16.25–16.50	25	Rogaev Evgeny I. Brain Neurogenomics	Institute of Cytology and Genetics, Siberian Branch of the Russian Academy of Sciences
16.50–17.15	25	Pevzner Pavel A. Megagrant Laboratory for Algorithmic Biology	Saint-Petersburg Academic University
17.15–17.40	25	Spokoiny Vladimir G. Statistical methods in neuroimaging	Moscow Institute of Physics and Technology (State University)
17.40–18.05	25	OBrien Stephen Genomics Studies and Analyses for the 21th Century	Saint-Petersburg State University
18.05–18.20	15	Anton D. Aleksashkin Nanozymes for spinal cord injury treatment	Lomonosov Moscow State University
18.20–18.45	25	Kondrashov Alexei Evolution of Adaptive landscapes	Lomonosov Moscow State University
18.45–19.00	15	Fedor Senatov Biocompatible UHMWPE-based materials perspective for bone and cartilage replacement	National University of Science and Technology "MISIS"
19.00			

POSTER REPORTS

NUMBER	PRESENTING AUTHOR	TITLE OF PRESENTATION
1	Yudintsev Andrey	Optical imaging of biological structures labelled with upconversion nanoparticles
2	Goryacheva Irina Yu.	Quantum dots in detection and diagnostic
3	Fedorova O.A.	NR4A3 as a novel transcriptional target of p53
4	Grigoryeva T.	Development of E3 ligase inhibitors with increased ability to pass through biological membranes
5	Tsikunib A.D.	Molecular mechanisms of the effect of iodine deficiency on athletes' physical efficiency under submaximum power load
6	Kuevda Elena V.	Detergent-based tracheal ventilation associated protocol for tissue-engineered rat lung
7	Gubareva Elena A.	Preclinical in vitro and in vivo diaphragmatic tissue engineering
8	Sotnichenko Alexander S.	Repopulation of decellularized rat heart scaffold with rat MSCs
9	Ter-Martirosyan Zaven G.	Creep and vibrocreep of sandy soils
10	Scherbovskikh Aleksei Evgenievich	Deflected modes of the nonwoven titanium material with a through porosity by the example of systems of dental implants
11	Scherbovskikh Aleksei Evgenievich	THE EVALUATION OF BIOLOGICAL COMPATIBILITY OF NONWOVEN TITANIUM MATERIAL WITH A THROUGH POROSITY ON CULTURE OF MULTIPOTENT MESENCHYMAL STROMAL CELLS IN EXPERIMENT
12	Valeeva Guzel	Optogenetic approach for investigation of GABA actions in the neuronal networks
13	Gilmudtinov Rudolf A.	RNA-binding proteins of CPEB family in gene expression regulation
14	Kachaev Zaur	Poly(A)-binding protein – interacting protein 2 (paip2) participates in sequential events of mRNA biogenesis
15	Pasynkova Kseniya A.	Genome organization and regulation of gene expression of chromatin-binding proteins
16	Shaposhnikov A.V.	Participation of transcription factor SAYP in immune response
17	Sokolova E.A.	Novel immunotoxin based on Pseudomonas exotoxin A for a targeted therapy of cancer
18	Bezriadnov D.V.	Cognitive impairment and suppression of neurogenesis in mice after irradiation
19	Lazutkin A.A.	3D histochemistry – a novel tool for analysis of neurogenesis
20	Amirkhanov R.N.	INHIBITION OF VIRAL INFECTION IN MDCK CELLS WITH INFLUENZA VIRUS-TARGETED ANTISENSE OLIGONUCLEOTIDES
21	Kupryushkin M.S.	EFFICIENT FUNCTIONALIZATION OF OLIGONUCLEOTIDES BY NEW ACHIRAL NONNUCLEOSIDIC MONOMERS
22	Markov Oleg V.	Novel liposome-based systems for effective delivery of therapeutic nucleic acids
23	Ilukha V.V.	RIP1K-dependent Inflammatory Response
24	Kurmyshkina Olga	The Science of High Technologies: from a Laboratory towards an Institute
25	Egorova Polina A.	Electrophysiological study of the SK channels modulators effect on the cerebellar Purkinje cells activity in laboratory mice in vivo
26	Zhemkov Vladimir A.	Crystallization of biotinylated huntingtin N17 domain with streptavidins
27	Pchitckaia Ekaterina Igorevna	Role of STIM2 protein in conditions of amyloid toxicity
28	Poguzhelskaya Ekaterina	Optimised clarity technique for visualization of mouse brain structures
29	Bolshakova Anastasia V.	Synaptic Dysfunction in an In Vitro Cortico-striatal Model System of Huntington's Disease
30	Grinevich Regina	Detection of carcinoembryonic antigen on colon cancer cells using single-domain antibodies and quantum dots
31	Belosludtseva Natalia	Mitochondrial lipid pore in the mechanism of glutamate-induced calcium deregulation of brain neurons and the cycling of ions across the mitochondrial membrane
32	Gorbacheva O.S	RESPIRATION, ION TRANSPORT, AND OXIDATIVE EXCHANGE OF RAT BRAIN AND LIVER MITOCHONDRIA IN EXPERIMENTAL EPILEPSY.
33	Fadeeva Irina S.	NEW APPROACH TO PREVENT MINERALIZATION OF VASCULAR GRAFTS BASED ON THE MITOCHONDRIAL HYPOTHESIS OF CALCINOSIS INITIATION
34	Fadeev Roman S.	Increase of drug resistance of acute myeloid leukemia cells in multicellular aggregates.
35	Notova Svetlana V.	Evaluation of the functional state of the organism using bioimpedance method
36	Nasretudinov Azat	Sensory feedback by spontaneous muscle twitches in neonatal rats

NUMBER	PRESENTING AUTHOR	TITLE OF PRESENTATION
37	Klinskaya E.O.	Analysis of content of fluoride, hardness, iron and manganese in the drinking water in Jewish Autonomous Region
38	Gilevich Irina V.	The evaluation of biological active molecules and stem cells after transplantation of tissue-engineered trachea
39	Stasenko Sergey	Mean field model of interneuron firing dynamics regulated by astrocytes
40	Gerasimova Svetlana	Design of optically coupled electronic neurons
41	Akhmetshina Dinara	In vivo two-photon calcium imaging of neuronal activity in newborn mouse with GCaMP6m calcium indicator
42	Valiullina Fliza Faritovna	Developmental switch from electrical to synaptic coupling between Layer 4 excitatory neurons in the neonatal rat barrel cortex
43	Lebedeva J.A.	Ethanol Effects on Spontaneous and Evoked Electrical Activity in Somatosensory Cortex of Neonatal Rats
44	Smirnov Yu.D.	Mobile drones complex of remote monitoring
45	Pogodaeva Anastasia N.	The study of the specific surface of the solid phase in hydrometallurgical processes and the development of measuring devices for its rapid control
46	Alidzhanova Inara	Changes in hormonal status of laboratory animals exposed to tobacco smoke intoxication
47	Mordukhovich Vladimir	Diversity of free-living nematodes from some deep areas in the North-Western Pacific
48	Kiyaeva Elena V.	The influence of xenobiotics on microelement structure of blood and morphological indicators of laboratory animals
49	Ogienko A.G.	Development of inhaled dry-powder formulations by novel particle engineering technology: freeze-drying of APIs solution in systems with clathrate formation
50	Akimov Sergey	Development of software for identifying propensity to alcohol addiction among youth
51	Tikhomirov K.N.	Some questions of the study of the dynamics of the sociocultural systems in the south of Western Siberia in the second half of the II millennium AD
52	Grigorenko A.P.	Study of intramembrane protease IMP1 related to presenilins in knockout mice model
53	Andreeva T.V.	Whole Genome Sequencing of Wild and Artificially Selected Foxes: Genetic Dissection of Social Behavior
54	Protasova M.S.	Complete Genome Re-Sequencing Identifies the Genetic Cause For X-linked Congenital Cerebral Ataxia
55	Saik Olga	The compellation of Human Gene Networks Controlling Feeding Behavior and Thermoregulation
56	Karamysheva T.V.	Ancient DNA hybridization in situ: Comparative Cytogenetic Analysis of Structural Organization of Hominin Genomes (Homo S. Sapiens and Homo S. Denisovan)
57	Gerasimenko Evgeniy O.	"Green" technologies – priority for scientific researches of the university scientists in the field of deep processing of grains and oilseeds
58	Afonnikov D.	Evolution of miRNA Genes in Archaic Hominins (Denisovan and Neanderthal)
59	Kuznetsov A.A.	Molecular-genetic study of Woodsia calcarea (Fomin) Schmakov population
60	Rybina Tatiana	Pyrogenic change of peatland ecosystems
61	Gureyeva Irina	Origin of the South-Siberian fern flora
62	Zverev Andrei	Taxonomic analysis method of E.S. Smirnov in floristic data processing
63	Alexandra A. Dalina	p73 is stabilized by Torin-2, a small molecule inhibitor of mTOR
64	Poteryakhina Anastasia V.	Potential role of NLRX1 as a tumor suppressor
65	Ratnikova Natalja	Alpaca-derived VHH-antibodies to CD47 on cancer cells
66	Sidorenko Alena	Up-regulation of proteases in cancer cells provides activation of oncolytic Sendai virus
67	Lezhnin Yuri	Comparison of Constitutive Promoters in Human T-cells



SCIENCE
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SECTIONS

Mathematics

September 18

St. Petersburg State University

Mathematics

10:30–18:10 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Kabanov Yu.			
10.30–11.15	45	Agrachev Andrei A. Geometry and control	Sobolev University of mathematics, Siberian Branch of the Russian Academy of Sciences
11.15–12.00	45	Kabanov Yuri M. Stochastic deflators and market portfolios	National Research University Higher School of Economics
12.00–12.30	COFFEE BREAKS		
12.30–12.55	25	Zograf Peter Enumeration of coverings and mathematical physics	Saint-Petersburg State University
12.55–13.20	25	Zhitlukhin Mikhail Comparison of random variables and financial measures of performance	National Research University Higher School of Economics
13.20–13.45	25	Palamarchuk Ekaterina Time preference and disturbance impact on long-run optimality in linear stochastic control systems	National Research University Higher School of Economics
13.45–14.10	25	Bogoyavlenskaya Olga On complete G2 holonomy metrics based on cones over $S^3 \times S^3$	Sobolev Institute of Mathematics, Siberian Branch of the Russian Academy of Sciences
14.10–14.35	25	Agapov Sergey On Integrability of the Sub-Riemannian Geodesic Flow for Goursat Distribution	Sobolev Institute of Mathematics, Siberian Branch of the Russian Academy of Sciences
14.35–15.35	LUNCH BREAKS		
Chairman: Agrachev A.			
15.35–16:00	25	Basalaev Sergey The Poincaré inequality on a certain class of sub-Riemannian spaces and applications	Sobolev Institute of Mathematics, Siberian Branch of the Russian Academy of Sciences
16.00–16.25	25	Karmanova Maria Metric aspects of Carnot–Carathéodory spaces and applications	Sobolev Institute of Mathematics, Siberian Branch of the Russian Academy of Sciences
16.25–16.50	25	Yakovlev Andrey A. New methods of mathematical modelling for solving problems of oil–gas industry.	Ufa State Aviation Technical University
16.50–17.15	25	Khabirov Salavat V. Hierarchy of submodels and gas rotational motions.	Ufa State Aviation Technical University
17.15–17.40	25	Gazizov Rafail New methods of group analysis for investigation differential equations of integer and fractional orders	Ufa State Aviation Technical University
17.40	CULTURAL EVENT		
16.40–17.05	25	Chumakov Peter M. Oncolytic virus therapy: problems to be solved	Novosibirsk State University
17.05–17.30	25	Danilov Sergei M. Is ACE a new marker for atrial fibrillation?	Bakulev Center for Cardiovascular Surgery
17.30–17.55	25	Khazipov Rustem N. Early activity patterns in the developing sensory cortex	Kazan (Volga Region) Federal University
17.55–18.10	15	Presentation from Acta Nature	
18.10	CULTURAL EVENT		

September 19

St. Petersburg State University

Mathematics

10:00–17:55 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Laptev Ari			
10.00–10.45	45	Laptev Ari Spectrum of partial differential equations: from Weyl asymptotics to Lieb–Thirring inequalities	Siberian Federal University
10.45–11.10	25	Tsikh Avgust Algebraic geometry between the classical and tropical approaches	Siberian Federal University
11.10–11.35	25	Gorodentsev Alexei L. Abelian lagrangian algebraic geometry	National Research University Higher School of Economics
11.35–12.00	25	Zhgoon Vladimir S. Symplectic varieties with invariant Lagrangian subvarieties	National Research University Higher School of Economics
12.00–12.30	COFFEE BREAKS		
12.30–12.45	25	Matveev Sergei V. New aspects of the complexity theory of 3– manifolds	Chelyabinsk State University
12.45–13.10	25	Akimova Alena A. Tabulation of global knots	Chelyabinsk State University
13.10–13.35	25	Ivanov Andrei Nonlinear matrix integration as a mapping approach for ordinary differential equations solving	Saint-Petersburg State University
13.35–14.00	25	Tankov Peter Approximate indifference pricing in exponential Lévy models	National Research University Higher School of Economics
14.00–15.00	LUNCH BREAKS		
15.00–15.25	25	Ananyevskiy Alexey Some computations with motivic generalized cohomology theories	Saint-Petersburg State University
15.25–15.50	POSTER SESSION		
15.50–16.15	25	Belov Yuri Localization of zeros for de Branges spaces and applications to canonical systems	Saint-Petersburg State University
16.15–16.40	25	Scherbina Tatyana Universality of the local regime in the random matrix theory	Saint-Petersburg State University
16.40–17.05	25	Garanzha Vladimir A. Iterative solver for polyconvex variational problems of finite hyperelasticity	Moscow Institute of Physics and Technology (State University)
17.05–17.30	25	Tsarev Sergey Integration of algebraic functions, polynomial approximation, nonclassical boundary problems and Poncelet–type theorems	Siberian Federal University
17.30–17.55	25	Sadykov Timur M. Dynamical systems defined by quadratic forms on projective spaces	Siberian Federal University

POSTER REPORTS

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
1	Gainetdinova A.A.	Mathematics	Integration methods for the systems of two second–order ODEs with four symmetries
2	Kalinichenko Artem A.	Mathematics	Feynman Approximation to Integrals with respect to Brownian Sheet on Lie Groups
3	Belokrysov Fedotov A.I.	Mathematics	Self-organization Delaunay mesh generator in nonregular implicit domains
4	Kudryavtseva L.N.	Mathematics	Review of structured mesh generator with coarse block structure for winged bodies
5	Korchagin Anton I.	Mathematics	New aspects of geometrical methods for mathematical physics
6	Pochekutov Dmitry	Mathematics	Amoebas of complex hypersurfaces in statistical thermodynamics
7	Siraeva Dilara Tahirovna	Mathematics	Chain of embedded submodels for gas dynamics equations with the equation of state, separated into the sum
8	Agureev Igor	Mathematics	THE ANALYSIS OF SECURE COMMUNICATIONS BASED ON A MULTYATTRACTOR SYSTEM
9	Yamileva Alfiya	Mathematics	Modeling of linear friction welding process
10	Yurieva Evgeniya V.	Mathematics	ON THE EXTENSION OF SHEAFS TO A FAMILY OF HOLOMORPHIC CURVES



SCIENCE
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SECTIONS

Computer Technologies

September 18

St. Petersburg University of Information Technologies, Mechanics, and Optics

Computer Technologies

10.30–17.00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Pardalos Panos M.			
10.30–11.20	50	Pardalos Panos M. Knowledge discovery and Optimization Heuristics for Massive Networks	National Research University Higher School of Economics
11.20–11.45	25	Kalyagin V.A. Identification of Network Structures in Statistical Data Sets	National Research University Higher School of Economics
11.45–12.15	COFFEE BREAKS		
12.15–12.40	25	Nikolaev Alexey Maximum clique problem and Its applications	National Research University Higher School of Economics
12.40–13.05	25	Boukhanovsky Alexander Multiscale simulation of critical phenomena in complex social systems: application to urgent computing	Saint-Petersburg National Research University of Information Technologies, Mechanics and Optics
13.05–13.30	25	Zimenko K.A. Adaptive and nonlinear control systems: from theory to practice	Saint-Petersburg National Research University of Information Technologies, Mechanics and Optics
13.30–13.55	25	Margun A. Modern approaches of technical systems control via Internet	Saint-Petersburg National Research University of Information Technologies, Mechanics and Optics
13.55–14.20	25	Kharkovskaia Tatiana Interval Observers for different classes of systems: main idea, constraints, method of design and simulation	Saint-Petersburg National Research University of Information Technologies, Mechanics and Optics
14.20–15.20	LUNCH BREAKS		
15.20–15.45	25	Utkina Irina A branch-and-bound algorithm for the cell formation problem.	National Research University Higher School of Economics
15.45–16.35	50	Fomin Fedor Vladimirovich Confronting intractability	Saint-Petersburg Department of V.A.Steklov Institute of Mathematics of the Russian Academy of Sciences
16.35–17.00	25	Filist S.A. Modeling of volt-ampere characteristics of bioactive points in the interactive medium with use of L-card interface	Southwest State University
18.00	CULTURAL EVENT		

September 19

St. Petersburg University of Information Technologies, Mechanics, and Optics

Computer Technologies

10.00–16.00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Klimentov A.			
10.00–10.50	50	Klimentov Alexei A Scalable Workload Management System For Data Intensive Science	National Research Centre "Kurchatov institute"
10.50–11.15	25	Nerush Evgeny N. Monte Carlo and particle-in-cell methods in simulation of extreme laser plasmas	Lobachevsky State University of Nizhni Novgorod
11.15–11.40	25	Batsyn M.V. On a real-life vehicle routing problem	National Research University Higher School of Economics
11.40–12.05	25	Komosko Larisa F. A fast greedy sequential heuristic for the vertex coloring problem	National Research University Higher School of Economics
12.05–12:35	COFFEE BREAKS		
12.35–13.00	25	Klochckov Eugeny V. Development of autonomous unmanned underwater vehicles	Samara State Aerospace University
13.00–13.25	25	Chernikov K.R. Computer system of automatic classification flyuorogramm	Southwest State University
13.25–13.50	25	Varnavsky A. Genetic algorithm to determine a rational regime of work and rest of enterprise employee	Ryazan State Radio Engineering University
13.50–14.15	25	Rybina Tatiana Mobile software for expedition works to assess the condition of natural and man-made objects	National Research Tomsk State University
14.15–15.15	LUNCH BREAKS		
15.15–14.40	25	Demianiuk Vitaly De Novo Protein Sequencing from Top-Down Tandem Mass Spectra	Saint-Petersburg National Research University of Information Technologies, Mechanics and Optics
15.40–16.05	25	Tesluk Anton Method for sorting and clustering of 'bid data' from XFEL experiment	National Research Centre "Kurchatov institute"

POSTER REPORTS

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
1	Polyakov A.N.	Computer Technologies	Integrated Workload and Data Management System MegaPanDA
2	Kovalchuk Sergey V.	Computer Technologies	Domain-Specific Support for Development of Composite Application with BigData Analytics Tasks
3	Varnavsky A.	Computer Technologies	Using mobile technologies to improve the effectiveness of prevention and diagnosis of ecologically caused diseases
4	Rybina Tatiana	Computer Technologies	Mobile software for expedition works to assess the condition of natural and man-made objects



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Mechanics and Engineering. Energy

September 18

St. Petersburg University of Information Technologies, Mechanics, and Optics

Mechanics and Engineering. Energy

10:30–18:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Akhatov I.			
10.30–11.00	30	Maruta Kaoru Low-speed counterflow flame experiments under microgravity toward comprehensive combustion limits theory	Far Eastern Federal University
11.00–11.30	30	Isaev Sergey Simulation of physical and technological processes in aeromechanics and thermal physics	Kazan National Research Technical University
11.30–12.00	30	Valiev Ruslan Mechanics of bulk nanostructured materials for innovation applications in engineering and medicine	Saint-Petersburg State University
12.00–12.30	COFFEE BREAK		
Chairman: Valiev R.			
12.30–13.00	30	Lomakin Eugene Experimental studies and mathematical modelling of behavior of advanced materials under complex loading conditions	Perm National Research Polytechnic University
13.00–13.30	30	Smurov Igor Additive Manufacturing by Selective Laser Melting and Cold Gasdynamic Spraying	Moscow State University of Technology "STANKIN"
13.30–14.00	30	Utyuzhnikov Sergei Flow Modelling Laboratory: Past, Current and Future Activity	Moscow Institute of Physics and Technology
14.00–15.00	LUNCH		
15.00–16.30	POSTER SESSION 1		
Chairman: Lomakin E.			
16.30–16.45	15	Yevgeniy Bondar Non-equilibrium flows in aerospace applications	Novosibirsk State University
16.45–17.00	15	Belosludov Vladimir R. Ices and Hydrates as Medium for Hydrogen Storage and Self-preservation Effect	Kutateladze Institute of Thermophysics
17.00–17.15	15	I. Egorov Numerical simulation of hypersonic unsteady flows	Moscow Institute of Physics and Technology
17.15–17.30	15	Bolozdynya Aleksandr R&D for Liquid Xenon Emission Detector RED100 To Search For Neutrino Coherent Scattering	National Research Nuclear University (Moscow Engineering Physics Institute)
17.30–17:45	15	Batrakov Andrei Helicopter CFD – flow around fuselage and rotor–fuselage interaction	Kazan National Research Technical University
17.45–18.00	15	Itkulova Yulia 3D Bubble/Droplet Dynamics with Free and Rigid Boundaries	Bashkir State University
18.00	CULTURAL EVENT		

September 19

St. Petersburg University of Information Technologies, Mechanics, and Optics

Mechanics and Engineering, Energy

10:00–18:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Utyuzhnikov			
10.00–10.30	30	Michael Kroening Towards Advanced Acoustic Viewing	Tomsk National Research Polytechnic University
10.30–11.00	30	Yoshiyuki Kawazoe Reliable Computer Simulation to Predict Efficient and Clean Hydrogen Storage Materials	Kutateladze Institute of Thermophysics
11.00–11.30	30	Georgios Barakos Current Status and Future Challenges in Helicopter Modelling and Simulation	Kazan National Research Technical University
11.30–12.00	COFFEE BREAK		
Chairman: Smurov			
12.00–12.15	15	Konstantin Suslov Smart Grid laboratories structure at the National Research Irkutsk State Technical University in the scope of Mega Grant Baikal	Irkutsk National Research State Technical University
12.15–12.30	15	Anatoly Demin Electrochemical devices based on solid oxide proton-conducting electrolyte	Institute of High Temperature Electrochemistry
12.30–12.45	15	Dmitriy Markovich Simulations of Processes in Energy Engineering	Novosibirsk State University
12.45–13.00	15	Ostrikov N.N. Laboratory of noise generation mechanisms and modal analysis	Perm National Research Polytechnic University
13.00–13.30	15	Akhatov Iskander Numerical Study and Experimental Discovery of Waves of Acoustically Induced Transparency in Bubbly Liquids	Bashkir State University
13.30–14.30	LUNCH		
Chairman: Akhatov I.			
14.30–16.30	POSTER SESSION 2		
16.30–16.45	15	Minaev Sergey New problems of combustion theory relevant to the development of energy production	Far Eastern Federal University
16.45–17.00	15	Sheinerman A. Effects of grain boundaries on strength and toughness of bulk nanostructured materials	Saint Petersburg State University
17.00–17.15	15	Tretyakov Michail Theoretical and experimental study of postcritical deformation stage of materials in tension-torsion tests	Perm National Research Polytechnic University
17:15–18:00	45	Leading Scientists' Discussion	

POSTER REPORTS

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
1	Faranosov G.A.	Mechanics, Engineering and Energy	Adaptation of the azimuthal decomposition technique to turbulent jet noise of an aircraft engine in the ground tests
2	Slesarenko V.Yu.	Mechanics, Engineering and Energy	Nanoglasses produced by severe plastic deformation
3	Tretyakova T.V.	Mechanics, Engineering and Energy	Study the influence of the loading conditions on the spatial-time inhomogeneity of inelastic deformation
4	Tashkinov M.A.	Mechanics, Engineering and Energy	Model of Failure Probability Calculation for Components of Heterogeneous Materials with Random Structure
5	Lutsenko Nickolay A.	Mechanics, Engineering and Energy	On Mathematical Modeling of Heterogeneous Combustion and Other Energy Release in Porous Media
6	Kalachev Maxim	Mechanics, Engineering and Energy	Working out of technology for the connection of pipes with internal and external protective coatings with preservation of the pipe cross section
7	Shitikova Marina V.	Mechanics, Engineering and Energy	Fractional calculus application in problems of non-linear vibrations of thin-walled structures with internal resonances
8	Rossikhin Yury A.	Mechanics, Engineering and Energy	A new dynamic theory of transient behavior of thin-walled beams of open profile with Cosserat-type micro-structure
9	Baurova N.I.	Mechanics, Engineering and Energy	Perspectives of using the intelligent materials based on carbon fiber for manufacturing and diagnosing of systems
10	Alekseev P.V.	Mechanics, Engineering and Energy	The probability calculation of main terminal destruction of wwer-1000 feedwater pump in view the stud bolts stress redistribution due the destruction some of them
11	Galiullin I.A.	Mechanics, Engineering and Energy	Bricard linkage modifications and conditions of mobility
12	Poddaeva Olga	Mechanics, Engineering and Energy	Technique for designing of models unique buildings and structures for the experimental study of the aerodynamic influences
13	Shilova A.I.	Mechanics, Engineering and Energy	Integrated study of strength, durability and failure mechanisms of fiber reinforced polymers.
14	Kirillin A.V.	Mechanics, Engineering and Energy	Methods of analysis of the maximum allowable risk in long-haul aircraft autoland
15	Akimov Pavel	Mechanics, Engineering and Energy	A Survey of Multilevel Wavelet-Based Discrete and Discrete-Continual Methods of Computational Local Structural Analysis
16	Zhidyayev Alexey	Mechanics, Engineering and Energy	The solid carbide end mills range design for hard-to-machine materials
17	Spaskova E.M.	Mechanics, Engineering and Energy	Experimental study of the mechanical properties of fibers and fabrics as reinforcements of composite materials
18	Volegov P.S.	Mechanics, Engineering and Energy	Multilevel modeling of polycrystalline materials inelastic deformation: description of complex loading and damage accumulation
19	Yankin A.S.	Mechanics, Engineering and Energy	Experimental research of behavior of low-modulus viscoelastic polymer composites under complex harmonic loads
20	Palchikovskiy V.V.	Mechanics, Engineering and Energy	Designing and building anechoic chamber with flow for development of innovative methods of investigation of noise generation mechanisms by turbulent flows
22	Miroshnichenko Taisia	Mechanics, Engineering and Energy	Simulation of combustion in converging microchannels
23	Obraz A.O.	Mechanics, Engineering and Energy	Computations of Laminar-Turbulent Transition Reynolds Numbers in Compressible Boundary Layers Using Stability Code HSFS
24	Khramshin Vadim R.	Mechanics, Engineering and Energy	Power and Resource Savings at the Manufacture of Flat Products at the Domestic Metallurgical Enterprises
25	Khramshin Vadim R.	Mechanics, Engineering and Energy	Energy Efficiency in the Municipal Fuel and Power System by Means of the Variable Speed Drive and Process Control Systems
26	Medvedev D.	Mechanics, Engineering and Energy	Development of stable proton-conducting electrolytes with perovskite structure
27	Chuiкин A.	Mechanics, Engineering and Energy	Application of solid oxide proton electrolytes for amperometric sensors: analysis of hydrogen in H ₂ +H ₂ O+N ₂ gas mixtures
28	Pomatilov F., Rekadze P.	Mechanics, Engineering and Energy	A Gear Pump with Polymeric Pinion Shafts research

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
29	Karandaev Alexander S.	Mechanics, Engineering and Energy	Energy Efficient Systems of Electrical Power Transportation, Distribution and Consumption at the Iron and Steel Work with the Full Technological Cycle
30	Karandaev Alexander S.	Mechanics, Engineering and Energy	Monitoring and Diagnostics of the Electrical Equipment as a Component of the Smart Grid Technologies in the Industrial Electric Networks
31	Doubenskaia M.A.	Mechanics, Engineering and Energy	Optical diagnostics in Selective Laser Melting
32	Batyrshin Eduard	Mechanics, Engineering and Energy	Droplet dynamics in non-uniform AC electric field
33	Sametov Sergey	Mechanics, Engineering and Energy	Numerical and Experimental Study of Non-spherical Bubble Dynamics
34	Itkulova Yulia	Mechanics, Engineering and Energy	Large Scale Simulations of Stokes Flow Using FMM/GPU Accelerated Boundary Element Method
35	Maryin Dmitry	Mechanics, Engineering and Energy	Molecular Dynamics Simulations of Nanobubbles.
36	Zamula Yuriy	Mechanics, Engineering and Energy	Characterization of elastic properties of asphalten films and encapsulated water-in-oil droplets using atomic force microscopy
37	Khramtsov Igor V.	Mechanics, Engineering and Energy	Designing facility for vortex ring generation
38	Sleptsov Sergey A.	Mechanics, Engineering and Energy	Pros and cons for DC-mode power supply of household appliances
39	Mingazov Marat R.	Mechanics, Engineering and Energy	Structural synthesis and analysis of 2-DOF spatial 5R linkage and its application
40	Kononenko R.	Mechanics, Engineering and Energy	In-place pipe's internal surface processing technology
41	Shcherbakov Alexey	Mechanics, Engineering and Energy	Ways and methods to improve the technical properties of electron beam technological complexes
42	Lagerev Igor A.	Mechanics, Engineering and Energy	Crane-manipulator dynamics simulation in case of designing and modernization
43	Litvinov Artem E.	Mechanics, Engineering and Energy	Investigation of effect of tension band saws on the stability of cutting process
44	Kildibaeva Svetlana R.	Mechanics, Engineering and Energy	Surfacing and accumulation of methane bubbles inside dome under water considering hydrate formation
45	Kosterin A.A.	Mechanics, Engineering and Energy	Optimization design and engineering study of the magnetic system with permanent magnets pig flaw longitudinal magnetization for pipes 8 "
46	Shereshevsky Mikhail	Mechanics, Engineering and Energy	Research of stress and strain state of sloping rectangular in plan shell with positive gaussian curvature made of different resistant material
47	Shoev G.	Mechanics, Engineering and Energy	Viscous Effects on the Triple-Shock Wave Structure under the von Neumann Paradox Conditions in Steady Gas Flows



SCIENCE
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SECTIONS

Physics, Nanotechnologies, Materials Technology, Space

September 18

St. Petersburg Polytechnic University

Physics. Nanotechnology. Materials Technology. Space

11:00–18:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Fuchs Julien Soulia			
11.00–11.25	25	Zakharov Vladimir Theory of Wind–Driven Sea	Novosibirsk State University
11.25–11.50	25	Dave Besson SiPM R&D and particle physics advances	National Research Nuclear University (Moscow Engineering Physics Institute)
11.50–12.15	25	Kuzmin Leonid S. Gravitational Waves, Inflation and Megagrant Issues	Nizhny Novgorod State Technical University n.a.R.E. Alekseev
12.15–12.40	25	Abrikosov Igor A. Theory for Accelerated Materials Design: New Tool for the 3d Millennium Materials Science	National University of Science and Technology 'MISIS'
12.40–13.05	25	Pakhov Vladimir Experimental studies for the helicopter fuselages and isolated main rotor at the low–speed wind tunnel	Kazan National Research Technical University named after A.N.Tupolev
13.05–13.35	COFFEE BREAKS		
Chairman: Nikitov S.A.			
13.35–14.00	25	Shitov Sergey V. Tunable superconducting metamaterials	National University of Science and Technology «MISIS»
14.00–14.25	25	Luque Antonio Development of a New Generation of Photovoltaics Based on Materials with an Intermediate Band	Ioffe Physical–Technical Institute of the Russian Academy of Sciences
14.25–14.50	25	Tagantsev Alexander K. Ferroic walls as elements for nanoelectronics	Ioffe Physical–Technical Institute of the Russian Academy of Sciences
14.50–15.15	25	Klapwijk Teunius M. Superconducting devices for THz detection	Moscow State Pedagogical University
15.15–16.15	LUNCH BREAKS		
Chairman: Kimel A.			
16.15–16.40	25	Matveev Andrei BN nanomaterials and their utilization for structural applications	National University of Science and Technology «MISIS»
16.40–17.05	25	Kenny Jose Theoretical modelling and experimental analysis of polymer matrix nanocomposites with carbon nanofillers	Institute of Macromolecular Compounds of the Russian Academy of Sciences
17.05–17.30	25	Gun'ko Yurii K. Quantum dot based chiral nanomaterials	Saint–Petersburg National Research University of Information Technologies, Mechanics and Optics
17.30–17.55	25	Oganov Artem R. Computational Materials Discovery	Moscow Institute of Physics and Technology (State University)
18.00	CULTURAL EVENT		

September 18

St. Petersburg Polytechnic University
 Physics. Nanotechnology. Materials Technology. Space
 11:00–18:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Chichkov B.			
11.00–11.25	25	Kavokin Alexey V. Bosonic Cascade Lasers	Saint-Petersburg State University
11.25–11.50	25	Snigirev Anatoly Refractive X-ray Optics: Success Story at 3rd Generation Synchrotrons and Promising Future for New 4th Generation X-ray Sources	Immanuel Kant Baltic Federal University
11.50–12.15	25	Zhelezov Dmitry S. Development of the laboratory of the diagnostics of novel optical materials for advanced lasers during the first half of mega-project period	Institute of applied physics of the Russian Academy of Sciences
12.15–12.40	25	Tsarev Maxim V. Terahertz Generation and Detection with Ultrashort Laser Pulses in Electro-Optic Crystals: Recent Progress and New Ideas	Lobachevsky State University of Nizhni Novgorod
12.40–13.05	25	Kimel Alexei V. Femtosecond opto-magnetism and opto-ferroelectricity: from fundamentals to new functionalities	Moscow State Technical University of Radio Engineering, Electronics and Automation
13.05–13.35	COFFEE BREAKS		
13.35–14.00	25	Popov Garri A. Development and investigations of space ionic motors	Moscow Aviation Institute
14.00–14.25	25	Dolgov Alexander D. Cosmology and astrophysics. Problems and perspectives.	Novosibirsk State University
14.25–14.50	25	Fuchs Julien S. Laboratory and numerical investigation of plasma phenomena in extreme astrophysical objects	Institute of Applied Physics of the Russian Academy of Sciences
14.50–15.15	25	Soldatkina Elena Record electron temperature in the quasistationary open magnetic trap at auxiliary microwave heating mode	Novosibirsk State University
15.15–16.15	LUNCH BREAKS		
Chairman: Lamberti C			
16.15–16.40	25	Marenkov Evgeny Plasma Surface Interactions and Plasma Technologies	National Research Nuclear University (Moscow Engineering Physics Institute)
16.40–17.05	25	Straumal Petr Shift in phase diagrams for copper alloys as a result of severe plastic deformation	National University of Science and Technology "MISIS"
17.05–17.30	25	Linkov Pavel High quantum yield CdSe/ZnS/CdS/ZnS multishell quantum dots for applications in biosensing and optoelectronics	National Research Nuclear University "Moscow Engineering Physics Institute"
17.30–17.55	25	Gelash Andrey Freak waves as a result of modulation instability	Novosibirsk State University
18.00	CULTURAL EVENT		

September 19

St. Petersburg Polytechnic University

Physics. Nanotechnology. Materials Technology. Space

9:30–19:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Ustinov A.			
9.30–9.55	25	Torrecillas Ramon S. Null Thermal expansion nanocomposites obtained by SPS	Saint-Petersburg State University
9.55–10.20	25	Estrin Yuri Novel Composite Materials: Designing with Geometry	Immanuel Kant Baltic Federal University
10.20–10.45	25	Yorsh Ivan Hyperbolic metamaterials: fundamentals and applications	Institute of applied physics of the Russian Academy of Sciences
10.45–11.10	25	Nikitov Sergei A. Metamaterials based on photonic, phononic, plasmonic and magnonic crystals and their use for microwave radioelectronics and photonics.	Lobachevsky State University of Nizhni Novgorod
11.10–11.35	25	Paleari Alberto Goals for Glass Science and Technology – Nano- and micro-structured functional glasses	Moscow State Technical University of Radio Engineering, Electronics and Automation
11.35–12.00	25	Krasnok A. All-dielectric nanoantennas	
12.00–12.30	COFFEE BREAKS		
Chairman: Klapwijk T.			
12.30–12.55	25	Butler James Diamond as an Electronic Material	Institute of Applied Physics of the Russian Academy of Sciences
12.55–13.20	25	Golubov A.A. Topological Phenomena in Superconducting Nanostructures	Moscow Institute of Physics and Technology (State University)
13.20–13.45	25	Lamberti Carlo Starting up the "Smart Materials" center at the SFedU	Southern State University, Russia
13.45–14.10	25	Ivanov Dmitrii A. From Channel-Forming Ionic Liquid Crystals to Nanostructured Ion-Conducting Polymer Membranes	Lomonosov Moscow State University
14.10–14.35	25	Romanov A.E. Disclinations in micro- and nanocrystalline objects	Togliatti State University
14.35–15.35	LUNCH BREAKS		
Chairman: Nabiev I.			
15.35–16.00	25	Belosludov R.V. Thermodynamic of Nanoporous Materials: Atomistic Level Description of with Applications to Energy Storage	Kutateladze Institute of Thermophysics, Siberian Branch of the Russian Academy of Sciences
16.00–16.25	25	Ustinov Alexey V. Superconducting metamaterials	National University of Science and Technology «MISIS»
16.25–16.50	25	Litvinenko A.N. Temperature Stabilization of the YIG Oscillator	Saratov State University
16.50–17.15	25	Ramos Gomes Fernanda Detection of metastases in biological samples of mouse models of human breast and pancreatic cancer using confocal and 2-photon microscopy in combination with single-domain antibody quantum-dots conjugates	Max Planck Institute for Experimental Medicine
17.15–17.40	25	Gaponik Nikolai Colloidal quantum dots architectures for nanophotonics	Technical University of Dresden
17.40–18.05	25	Baranov P. Application of optically detected magnetic resonance for study of spin-dependent processes in semiconductor nanostructures	Ioffe Physical-Technical Institute of the Russian Academy of Sciences
18.05–18.30	25	Cherbunin Roman V. Ultrafast light modulator based on the semiconductor nanostructure with planar microcavity	Saint-Petersburg State University
18.30–18.55	25	Grigoryev E.G. Advanced electromagnetic methods of consolidation of powder materials	National Research Nuclear University (Moscow Engineering Physics Institute)
19:00			

September 19

St. Petersburg Polytechnic University
Physics. Nanotechnology. Materials Technology. Space
9:30–19:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Zakharov V.			
9.30–9.55	25	Petrsev Nikolay Electrically induced magnetization dynamics in ferromagnetic nanostructures with voltage-controlled interfacial anisotropy	Ioffe Physical–Technical Institute of the Russian Academy of Sciences, St. Petersburg, Russia
9.55–10.20	25	Shevyakina D.M. Formation of nonlinear optical structures in lithium niobium silicate glass by the laser beam	D. Mendeleev University of Chemical Technology of Russia
10.20–10.45	25	Khromov A. RED100 detector for measuring coherent neutrino–nucleus scattering	National Research Nuclear University (Moscow Engineering Physics Institute)
10.45–11.10	25	Rudenko Oleg Radio–physics: from mathematics to medical instrument	Lobachevsky State University of Nizhni Novgorod
11.10–11.35	25	Nabiev Igor R. Nano–bio hybrid materials with the energy transfer properties	National Research Nuclear University (Moscow Engineering Physics Institute)
11.35–12.00	25	Belov Pavel A. Nonlinear, nonlocal and tunable metamaterials	Saint–Petersburg National Research University of Information Technologies, Mechanics and Optics
12.00–12.30	COFFEE BREAKS		
Chairman: Kavokin A.			
12.30–12.55	25	Lomova Maria Protein–polyphenol microcapsules degradation by enzymes	Saratov State University
12.55–13.20	25	Popova Elena SiPM application in Medical Physics	National Research Nuclear University (Moscow Engineering Physics Institute)
13.20–13.45	25	Chichkov Boris N. Laser nanotechnologies and their applications in photonics and biomedicine	The Institute on Laser and Information Technologies of the Russian Academy of Sciences
13.45–14.10	25	Turitsyn Sergei K. Capacity of nonlinear fibre channels	Novosibirsk State University
14.10–14.35	25	Zapasskiy V.S. Magnetization noise spectroscopy	Saint-Petersburg State University
14.35–15.00	25	Lotarev S.V. Space–selective heating and growth of crystalline lines in glass using a femtosecond laser	D. Mendeleev University of Chemical Technology of Russia
15.00–16.00	LUNCH BREAKS		
Chairman: Rudenko O.			
16.00–16.25	25	Soldatov A. Advanced Picodiagnosics: Determination of the 3D Local Atomic and Electronic Structure Parameters of Nanostructured Materials by X–Ray Spectroscopies and Computer Modeling	Southern Federal University
16.25–16.50	25	Wagner Friedrich Fusion Research by the MEGA–Grant Laboratory RLPAT	Saint–Petersburg State Polytechnical University
16.50–17.15	25	Krasnopolsky Vladimir A. Studies of Planetary Atmospheres	Moscow Institute of Physics and Technology
17.15–17.40	25	Oberst Jurgen Geodesy, Cartography, and Future Exploration of Planets and Satellites.	Moscow State University for Geodesy and Cartography
17.40–18.05	25	Mirzoyan Razmick Detector Complex TAIGA for Exploring Our Galaxy and Universe in Very High Energy Gamma and Cosmic Rays	Irkutsk State University
18.05–18.30	25	Pukhov Alexander M. Hybrid and quasistatic simulations	Lobachevsky State University of Nizhni Novgorod
18.30–18.55	25	Kazansky Petr Ultrafast Laser Nanostructuring of Transparent Materials: From Singular Optics to Eternal Data Storage	D. Mendeleev University of Chemical Technology of Russia
19:00			

POSTER REPORTS

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
1	Gorin D.A.	Physics, Nanotechnologies, Materials Technology, Space	Nanostructured materials with remote controlled properties: fabrication and perspectives for theranostic applications
2	Glukhova O.E.	Physics, Nanotechnologies, Materials Technology, Space	Influence of ultrasonic treatment on the eigenfrequencies of composite microcapsules with zinc oxide particles: numerical simulation
3	Patrov Mikhail I.	Physics, Nanotechnologies, Materials Technology, Space	The retention of particles and energy in the plasma of the spherical tokamak Globus-M and -M2
4	Korneev Alexander	Physics, Nanotechnologies, Materials Technology, Space	Spin-off company and university-research: pros and cons
5	Ryabchun Sergey	Physics, Nanotechnologies, Materials Technology, Space	Superconducting nanodevices: fundamentals and applications
6	Sorokin Pavel B.	Physics, Nanotechnologies, Materials Technology, Space	Theoretical investigation of fabrication of two-dimensional transition metal dichalcogenides
7	Kuznetsov S.A.	Physics, Nanotechnologies, Materials Technology, Space	Quasi-optical components and systems for submillimeter-wave and terahertz applications
8	Dayneko Sergey	Physics, Nanotechnologies, Materials Technology, Space	Hybrid structures based on organic semiconductors and CdSe quantum dots for photovoltaic applications
9	Martynov I.L.	Physics, Nanotechnologies, Materials Technology, Space	Organic polymer and quantum dot photoluminescence spectrum modulation with porous silicon based microcavities
10	Solovyeva Daria	Physics, Nanotechnologies, Materials Technology, Space	Silver nanoparticles strongly affect the properties of Halobacterium salinarum photosensitive purple membranes containing the membrane protein bacteriorhodopsin
11	Poltavtsev Sergei	Physics, Nanotechnologies, Materials Technology, Space	Magnetic-field-controlled optical memory based on photon echo effect
12	Kumpan A.V.	Physics, Nanotechnologies, Materials Technology, Space	The measurements of backgrounds at Spallation Neutron Source for RED100 experiment
13	Budnev Nikolay	Physics, Nanotechnologies, Materials Technology, Space	First Results From the TUNKA and HiSCORE Detectors
14	Andreev Viacheslav	Physics, Nanotechnologies, Materials Technology, Space	Concentrator Photovoltaic Installations Based on Multijunction Solar Cells
15	Orlova A.O.	Physics, Nanotechnologies, Materials Technology, Space	Chiral QDs as a cancer theranostic agent
16	Mukhina M.V.	Physics, Nanotechnologies, Materials Technology, Space	INVESTIGATION OF INHERENT CHIRALITY OF CdSe/ZnS NANOCRYSTALS
17	Drutskoy A.	Physics, Nanotechnologies, Materials Technology, Space	SiPM applications for the COMET and ILC experiments
18	Uglov Timofey	Physics, Nanotechnologies, Materials Technology, Space	From Belle to Belle2
19	Volkova Elena Evgenevna	Physics, Nanotechnologies, Materials Technology, Space	Study of response uniformity of scintillator strips with WLS fiber and SiPM readout
20	Mironov Dmitry	Physics, Nanotechnologies, Materials Technology, Space	Direct readout of scintillator tiles with SiPM
21	Smirnova M.O.	Physics, Nanotechnologies, Materials Technology, Space	Radar detection of cosmic rays with the TARA experiment
22	Rusinov Petr	Physics, Nanotechnologies, Materials Technology, Space	The formation of nanostructured surface layers of a material with shape memory effect of the TiNiCo deposition melt of the fusible metal at a temperature gradient
23	Arzhannikov A.V.	Physics, Nanotechnologies, Materials Technology, Space	The Laboratory of Advanced Research on Millimeter and Terahertz Radiation: Status and Prospects
24	Fomin Yu. D.	Physics, Nanotechnologies, Materials Technology, Space	Dynamical Frenkel line in metallic liquids: Iron fluid
25	Trunin M.R.	Physics, Nanotechnologies, Materials Technology, Space	MIPT Interdisciplinary Center for Basic Research
26	Bakurskiy S.V.	Physics, Nanotechnologies, Materials Technology, Space	Josephson Effect in Superconductor-Ferromagnet Junctions
27	Kalashnikova Alexandra	Physics, Nanotechnologies, Materials Technology, Space	Ultrafast laser-induced spin and lattice dynamics in a copper metaborate CuB2O4
28	Salasyuk Alexey	Physics, Nanotechnologies, Materials Technology, Space	Generation and detection of picosecond shear strain pulses in (311)-GaAs

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
29	Shelukhin Leonid	Physics, Nanotechnologies, Materials Technology, Space	Laser-induced spin dynamics in thin ferrimagnetic garnet films with easy-axis anisotropy
30	Lyulin Sergey	Physics, Nanotechnologies, Materials Technology, Space	Computer simulation of thermoplastic polymers and polymer-based nanocomposites
31	Baturin Vladimir	Physics, Nanotechnologies, Materials Technology, Space	Structure and stability of small silicon clusters passivated by hydrogen
32	Blinov I.V.	Physics, Nanotechnologies, Materials Technology, Space	High-dimensional description of quasiperiodic materials
33	Qinggao Wang	Physics, Nanotechnologies, Materials Technology, Space	New reconstructions of rutile TiO ₂ surfaces predicted by an evolutionary method
34	Frolov Vladimir L.	Physics, Nanotechnologies, Materials Technology, Space	The SURA Heating Facility: Status and Recent Results.
35	Adamtsevich A.O.	Physics, Nanotechnologies, Materials Technology, Space	Development of calorimetric methods in analysis of composite building materials
36	Arkhincheev Valeriy	Physics, Nanotechnologies, Materials Technology, Space	Fractional calculus and features of diffusion and capture of spines in low k dielectric nanostructured materials
37	Savinkov V.I.	Physics, Nanotechnologies, Materials Technology, Space	The international laboratory of glass based functional materials: from applied researches to industrial technologies.
38	Atroschenko G.N.	Physics, Nanotechnologies, Materials Technology, Space / Chemistry	Spheroidized glassy materials for local radiotherapy and diagnostics
39	Li Elina Valerevna	Physics, Nanotechnologies, Materials Technology, Space	Structure and mechanical properties of Zr alloy E125 after equal-channel angular pressing
40	Oleinikov Vladimir	Life Science / Physics, Nanotechnologies, Materials Technology, Space	Fluorescent pH and temperature sensors based on hybrid nanoparticles
41	Ershov P.	Physics, Nanotechnologies, Materials Technology, Space	The high-resolution x-ray diffraction of Si-Ge nano-heterostructure performed by using x-ray refractive optics
42	Polikarpov Maxim	Physics, Nanotechnologies, Materials Technology, Space	Diamond refractive optics for ultimate storage rings
43	Laryushin Ivan	Physics, Nanotechnologies, Materials Technology, Space	Laser-plasma generation of tunable few-cycle mid-infrared pulses
44	Golubev Iurii Aleksandrovich	Physics, Nanotechnologies, Materials Technology, Space	Influence of different parameters on temperature distribution in the weld area during friction stir welding
45	Vikarchuk A.A.	Physics, Nanotechnologies, Materials Technology, Space	Practice of creation of fundamentally new nanocatalysts with base metals
46	Dorogov M.V.	Physics, Nanotechnologies, Materials Technology, Space	Effect of temperature fields on the pentagonal copper micro- and nanoobjects
47	Gryzunova N.N.	Physics, Nanotechnologies, Materials Technology, Space	DEVELOPING WAYS TO INCREASE THE SPECIFIC SURFACE OF THE METAL CATALYST AND CARRIER FOR THEM
48	Maleeva Natalia	Physics, Nanotechnologies, Materials Technology, Space	An elementary component of superconducting metamaterials
49	Brekhov K.A.	Physics, Nanotechnologies, Materials Technology, Space	Investigating the effect of induced optical inhomogeneities in the crystal ferroelectric semiconductor Sn ₂ P ₂ S ₆ by confocal microscopy
50	Samotokhin O.V.	Physics, Nanotechnologies, Materials Technology, Space	Study of the photo-induced optical inhomogeneity effect in a ferroelectric Sn ₂ P ₂ S ₆ crystal pumped by a femtosecond laser
51	Kovaleva I.V.	Physics, Nanotechnologies, Materials Technology, Space	Features magnetic-impulse-compaction of aluminium oxide.
52	Bogachev I.	Physics, Nanotechnologies, Materials Technology, Space	Spark Plasma Sintering of Oxide Dispersion Strengthened Steels for Fast Nuclear Reactor' Active Zones
53	Yurlova M.S.	Physics, Nanotechnologies, Materials Technology, Space	Flash-sintering of oxide ceramic
54	Yurlova M.S.	Physics, Nanotechnologies, Materials Technology, Space	Properties of UN Sintered by High Voltage Electric Discharge Consolidation
55	Aleksandrova E.V.	Physics, Nanotechnologies, Materials Technology, Space	Multiscale modeling of the spark plasma sintering processing
56	Ilyina A.M.	Physics, Nanotechnologies, Materials Technology, Space	Fundamental investigation of the role of the electric current in spark-plasma sintering process

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
57	Demin I.Y.	Physics, Nanotechnologies, Materials Technology, Space	Microcalcification detection in breast tissue with use of acoustic radiation pressure
58	Khalitov R.Sh.	Physics, Nanotechnologies, Materials Technology, Space	Measurement shear modulus of soft tissues by elastography
59	Belov Maxim Pavlovich	Physics, Nanotechnologies, Materials Technology, Space	Strongly anharmonic lattice dynamics of palladium hydride from first principles calculations
60	Lugovskoy Andrey V.	Physics, Nanotechnologies, Materials Technology, Space	Pressure and temperature induced elastic phase transitions in metals
61	Ponomareva Alena Valer'evna	Physics, Nanotechnologies, Materials Technology, Space	Influence of alloying effects on the elastic properties of B2 NiAl alloys: theoretical predictions and experimental verification
62	Smirnova E.A.	Physics, Nanotechnologies, Materials Technology, Space	Ab initio investigation of ground-state properties of Ir–Os alloys
63	MOsuagin Igor	Physics, Nanotechnologies, Materials Technology, Space	Highly Efficient Parallel Molecular Dynamics Using Temperature-Dependent Effective Potential Method
64	Tal' Alexey	Physics, Nanotechnologies, Materials Technology, Space	Molecular dynamics simulation of growth of Cu nanoclusters from Cu-ions in a plasma
65	Dayneko Sergey	Physics, Nanotechnologies, Materials Technology, Space	Application of Quantum dots CdSe/ZnS in modern LED technology
66	Chistyakov A.	Physics, Nanotechnologies, Materials Technology, Space	Fluorescent pH- and thermo sensors based on hybrid nanoparticles
67	Krivenkov Victor	Physics, Nanotechnologies, Materials Technology, Space	Two-photon-induced Förster resonance energy transfer in a hybrid material engineered from semiconductor quantum dots and the membrane protein bacteriorhodopsin
68	Lenok Vladimir	Physics, Nanotechnologies, Materials Technology, Space	Coincident Operation of HiSCORE with Imaging Atmospheric Cherenkov Telescopes in TAIGA: A Novel Approach for Exploring the Sky in Very High Energy Gamma and Cosmic Rays
69	Panchak Alexander N.	Physics, Nanotechnologies, Materials Technology, Space	The effect of the dispersion of quantum dot sizes in the widening of the absorption lines of electron transitions
70	Levin Roman V.	Physics, Nanotechnologies, Materials Technology, Space	Manufacturing technology and research of AlGaAsSb (Eg~1.35eV) alloys with InAs quantum dots
71	Salii Roman	Physics, Nanotechnologies, Materials Technology, Space	Investigation of MOVPE growth peculiarities in InAs–GaAs system for InAs quantum dot formation
72	Chekalin Alexander	Physics, Nanotechnologies, Materials Technology, Space	Overheating temperature evaluation of the p–n junction area in A3B5 based nanoheterostructure photocells in different operational regimes
73	Kuznetsov I.	Physics, Nanotechnologies, Materials Technology, Space	Optical media and interfaces thermal conductivity measurement with new optical methods
74	Abramova A.N.	Physics, Nanotechnologies, Materials Technology, Space	Structural phase transformations in copper icosahedral small particles as a result of their annealing in inert and reactive atmospheres
75	SMIRNOVA M.O. (студент)	Physics, Nanotechnologies, Materials Technology, Space	Scintillation gamma-ray detector LaBr3(Ce) for Neutron Capture Therapy
76	Andronikova Daria	Physics, Nanotechnologies, Materials Technology, Space	X-ray diffraction studies of high-Zr-content lead zirconate titanate.
77	Nazarychev V.	Physics, Nanotechnologies, Materials Technology, Space	Mechanical properties of crystallizable polyimides: molecular-dynamics simulation
78	Bakhmetieva Nataliya	Physics, Nanotechnologies, Materials Technology, Space	Formation of artificial plasma perturbations in the lower ionosphere: results of the experimental studies using SURA heating facility
79	Saveleva M.S.	Physics, Nanotechnologies, Materials Technology, Space	Composite materials based on electrospun nanofibers of polycaprolactone, incorporating vaterite microcontainers with photodynamic dye
80	Bondareva Olga Sergeevna	Physics, Nanotechnologies, Materials Technology, Space	The effect of Si content in the steel on the thickness and structure of hot zinc coating.
81	Smirnov Vladimir A	Physics, Nanotechnologies, Materials Technology, Space	Mechanical Properties of the Sulfur–Bituminous Pavements
82	Xiaohu Yu	Physics, Nanotechnologies, Materials Technology, Space	Theoretical Predication of Stability of CemOn Clusters
83	Noskov A.I.	Physics, Nanotechnologies, Materials Technology, Space	Additive laser technologies laboratory, Kazan National Research Technical University

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
84	Yankin Sergey	Physics, Nanotechnologies, Materials Technology, Space	REDUCE OF SIGNAL LOSSES IN MICROWAVE RADIO FREQUENCY IDENTIFICATION TAGS
85	Fedotov Sergey S.	Physics, Nanotechnologies, Materials Technology, Space	Femtosecond laser writing birefringence structures inside titanium-silicate glass
86	Golubev N.V.	Physics, Nanotechnologies, Materials Technology, Space	Nanostructured gallium germanosilicate glasses: light emission spectroscopy and applications.
87	Prikhozhenko Ekaterina Sergeevna	Physics, Nanotechnologies, Materials Technology, Space	SERS-platform based on nonwoven chitosan fiber with embedded silver nanoparticles
88	Kovaleva Evgenia A	Physics, Nanotechnologies, Materials Technology, Space	Contact-induced spin polarization in BNNT(CNT)/TM nanocomposites
89	Tsarik Konstantin.A.	Physics, Nanotechnologies, Materials Technology, Space	MBE growth of AlN/GaN heterostructures on carbonized Si(111) substrates
90	Ignat'ev Mikhail	Physics, Nanotechnologies, Materials Technology, Space	Generalization of Laplace's pressure law
91	Kuklin Artem Valentinovich	Physics, Nanotechnologies, Materials Technology, Space	Electronic Structure and Magnetic Properties of VN Monolayer: A DFT Study
92	Gorbunova Anastasia	Physics, Nanotechnologies, Materials Technology, Space	Structure of swirling flow with time-dependent heat release
93	Feya Oleg	Physics, Nanotechnologies, Materials Technology, Space	Surface reconstructions of SiO ₂ predicted by an evolutionary method
94	Royzen Valery	Physics, Nanotechnologies, Materials Technology, Space	Crystal structure of high-pressure methane phases
95	Porfirev Aleksey	Physics, Nanotechnologies, Materials Technology, Space	Trapping and manipulation of light-absorbing particles in air using Hermite-Gaussian laser beam
96	Kovaleva I.V.	Physics, Nanotechnologies, Materials Technology, Space	Features magnetic-impulse compaction of aluminium oxide
97	Pcheliakov Denis Aleksandrovich	Physics, Nanotechnologies, Materials Technology, Space	Pressure-Assisted Flash-Sintering of Oxide ceramics
98	Minaev Nikita Vladimirovich	Physics, Nanotechnologies, Materials Technology, Space	Synthesis of neuroscaffolds by two-photon laser photopolymerization
99	Demeneva N.	Physics, Nanotechnologies, Materials Technology, Space	Improvement of long term electrical conductivity between LSM cathode and Fe/Cr based steel current collector with modified near surface layer
100	Solis Pinargote Nestor Washington	Physics, Nanotechnologies, Materials Technology, Space	Technological possibilities of powder's modification for the preparation of nanostructured composites
101	Belykh R.	Physics, Nanotechnologies, Materials Technology, Space	FTIR studies of surface processes on dispersed metal halides
102	Krat Stepan A.	Physics, Nanotechnologies, Materials Technology, Space	DEUTERIUM CODEPOSITON AND RELEASE FROM LITHIUM-DEUTERIUM FILMS, DEPOSITED IN THE MAGNETRON DISCHARGE
103	Sokolov Andrey	Physics, Nanotechnologies, Materials Technology, Space	Development of ultra-sensitivity detectors of nuclei recoil for registration of dark matter and low energetic neutrino
104	Khmyrov R.S.	Physics, Nanotechnologies, Materials Technology, Space	Selective laser melting of ceramic powder materials
105	Sadovnikov A.V.	physics, Nanotechnologies, Materials Technology, Space	Discrete diffraction in coupled anisotropic waveguides
106	Shemyakina Ekaterina	Physics, Nanotechnologies, Materials Technology, Space	Energy calibration of Ar-based ultimate sensitivity detectors for dark matter search and neutrino detection experiments



SCIENCE
OF THE
FUTURE

SECTIONS

Earth Sciences

September 18

St. Petersburg State University

Earth Sciences

10:30–18:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Guggenberger G.			
10.30–10.50	20	Guggenberger G. Controls of organic carbon storage and transformation in Siberian permafrost soils	Sukachev Institute of Forest, Siberian Branch of the Russian Academy of Sciences
10.50–11.05	15	Shibistova O. A metabolomics approach to infer organisms–environment interactions in permafrost soils of the Taymyr peninsula, northern Siberia	Sukachev Institute of Forest, Siberian Branch of the Russian Academy of Sciences
11.05–11.20	15	Zakharov Vyacheslav The WSibISO program: water isotopes and carbon GHGs observations and modeling for understanding high latitude climate processes	Ural Federal University
11.20–11.35	15	Rokotyan Nikita Remote sensing of water isotopologues at the Ural Atmospheric Station	Ural Federal University
11.35–11.55	20	Pokrovsky Transport of Carbon, Major and Trace Elements from Northern Eurasia to the Arctic Ocean: Mechanisms and Fluxes	National Research Tomsk State University
11.55–12.10	15	Kirpotin S.N. Global Climate-Regulation Function of West-Siberian Mires	National Research Tomsk State University
12.10–12.40	COFFEE BREAKS		
Chairman: Kurths J.			
12.40–13.00	20	Moiseenko T.I. FACTORS AND MECHANISMS OF NATURAL AND ANTHROPOGENIC WATER ACIDIFICATION: CASE STUDY OF WESTERN SIBERIA AND EUROPEAN RUSSIA	Tyumen State University
13.00–13.20	20	Semiletov Igor PERMAFROST THAW AND REDISTRIBUTION OF CARBON FROM LANDS AND OCEANS TO THE ATMOSPHERE: THE EAST SIBERIAN REGION	National Research Tomsk Polytechnic University
13.20–13.35	15	Charkin Alexander Wind-driven water mass dynamics and the suspended particulate matter fields formation in the east Siberian Arctic Shelf	National Research Tomsk Polytechnic University
13.35–13.50	15	Nicolsky D.J. Modeling sub-sea permafrost in the East Siberian Arctic Shelf: The Laptev Sea Region	National Research Tomsk Polytechnic University
13.50–14.10	20	Valentini Riccardo Environmental assessment and prospects of Russia agriculture development under conditions of Global climate and technological changes	Russian State Agrarian University – Moscow Agricultural Academy named after K.A.Timiryazev
14.10–14.25	15	Vasenev Ivan I. Informational and methodological support for land-use agroecological optimization in terms of the increased land heterogeneity in the Central region of Russia	Russian State Agrarian University – Moscow Agricultural Academy named after K.A.Timiryazev
14.25–14.40	15	Vasenev Vyacheslav I. The main factors of spatial–temporal variability of greenhouse gases soil fluxes in terms of urban ecosystems	Russian State Agrarian University – Moscow Agricultural Academy named after K.A.Timiryazev
14.40–14.55	15	Yaroslavtsev A.M. Seasonal dynamics of greenhouse gas and energy fluxes at the representative agroecosystem level in the Central region of Russia	Russian State Agrarian University – Moscow Agricultural Academy named after K.A.Timiryazev
14.55–15.50	LUNCH BREAKS		

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Koltermann K.			
15.50–16.10	20	Groisman Pavel Y. Hydrological Cycle Lab: Meeting the challenges of understanding and predicting midlatitudinal hydrological cycle	P.P. Shirshov Institute of Oceanology of the Russian Academy of Sciences
16.10–16.25	15	Gulev Sergey The ocean impact on climate: role of different scales and different mechanisms of air–sea interaction	P.P. Shirshov Institute of Oceanology of the Russian Academy of Sciences
16.25–16.40	15	Zolina Olga Understanding Hydroclimate Extremes in a Changing Climate	P.P. Shirshov Institute of Oceanology of the Russian Academy of Sciences
16.40–16.55	15	Gelfan Alexander Large-basin hydrological response to GCM output: evaluating uncertainty caused by internal atmospheric variability	P.P. Shirshov Institute of Oceanology of the Russian Academy of Sciences
16.55–17.10	15	Osadchiev A. A New Method of Quantifying River Discharge Based on Satellite Observations of River Plumes	P.P. Shirshov Institute of Oceanology of the Russian Academy of Sciences
17.10–17.25	15	Dunichkin Ilya V. Reconstruction of Offshore Structures with the Change of Function. Questions typology considering the influence of climate	National Research Moscow State University of Civil Engineering
17.25–17.40	15	Atayev Zagir Spatial differentiation and anthropogenic transformation of lowland–foothill landscapes of the North–East Caucasus	Dagestan State Pedagogical University
17.40–17.55	15	Duchkov A.A. FAST MODELLING OF FIRST-ARRIVAL SEISMIC WAVEFORMS AND APPLICATIONS IN SEISMIC EXPLORATION AND SEISMOLOGY	Novosibirsk State University
18.00	CULTURAL EVENT		

September 19

St. Petersburg State University

Earth Sciences

10:00–18:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Groisman P.			
10.00–10.20	20	Koltermann Klaus Peter Assessing the Risks of Natural Hazards in Russia's Coastal Zones	Lomonosov Moscow State University
10.20–10.35	15	Gushchina Daria Large scale predictors of extreme precipitation in the coastal natural–economic zones of European part of Russia	Lomonosov Moscow State University
10.35–10.50	15	Sokratov S.A. Risk of natural hazards at the Black Sea coastal territories of the Caucasus	Lomonosov Moscow State University
10.50–11.05	15	Gippius F.N. Annual and seasonal variability of wind wave parameters on the Black Sea	Lomonosov Moscow State University
11.05–11.20	15	Myslenkov S.A. Verification of operational wave forecast for Tsemes Bay of the Black Sea	Lomonosov Moscow State University
11.20–11.35	15	Kireeva Maria Contemporary changes in hydrological regime and its hazardous features (the case study for European part of Russia)	Lomonosov Moscow State University

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
11.35–11.50	15	Varshanina Tatyana P. INTELLECTUAL TECHNOLOGIES OF POINT MANAGEMENT OF RISK OF EMERGENCY SITUATIONS DUE TO NATURAL DISASTERS	Adyghe State University
11:50–12:20	COFFEE BREAKS		
Chairman: Zilitinkevich S.			
12.20–12.40	20	Zilitinkevich Sergej S. Atmospheric planetary boundary layer: physical object and our habitat	Lobachevsky State University of Nizhni Novgorod
12.40–12.55	15	Hanna Lappalainen "Pan–Eurasian Experiment (PEEX) – international interdisciplinary research programme on the Arctic and North Eurasia environment"	University of Helsinki
12.55–13.10	15	Esau Igor High–resolution regional climate services based on turbulence–resolving simulations	Nansen Environmental and Remote Sensing Centre
13.10–13.25	15	Iudin Dmitry I. Electric processes in the atmospheric boundary layer	Lobachevsky State University of Nizhni Novgorod
13.25–13.40	15	Ilin Nikolay Lightning Physics and Effects: Mysteries of the Spectacular	Institute of Applied Physics of the Russian Academy of Sciences
13.40–14.00	20	Chapron Bertrand Ocean from Space: progress and challenges	Russian State Hydrometeorological University
14.00–14.15	15	Zabolotskikh Elizaveta New possibilities for extreme wind study opened by the generation of satellite passive microwave instruments	Russian State Hydrometeorological University
14.15–14.30	15	Myasoedov Alexander Sunglint imagery for investigating oceanic internal waves	Russian State Hydrometeorological University
14.30–14.45	15	Bolkhovskiy I. Web application Syntool Arctic as a tool to perform sea surface monitoring in the Arctic region	Russian State Hydrometeorological University
14.45–15.00	15	Kozlov Igor Satellite observations of internal waves in the Russian Arctic seas	Russian State Hydrometeorological University
15.00–16.00	LUNCH BREAKS		
Chairman: Chapron B.			
16.00–16.20	20	Thiede Joern THE NEW KLIPPEN–LABORATORY OF THE SPBGU SCHOOL OF EARTH SCIENCES	Saint-Petersburg State University
16.20–16.35	15	Kuznetsov V. TODAY'S PROJECTS OF THE RESEARCH LABORATORY "GEOMORPHOLOGIC AND PALEOGEOGRAPHIC STUDIES OF POLAR REGIONS AND WORLD OCEAN": APPLIED GEOCHRONOLOGICAL DATING AND RESEARCH	Saint-Petersburg State University
16.35–16.55	20	Ohtani Eiji Experimental study of materials at high pressures and a coherent thermodynamic model of the deep structure of the Earth: Central region of the Earth	Institute of Geology and Mineralogy, Siberian Branch of the Russian Academy of Sciences
16.55–17.10	15	Litasov Konstantin Carbonated melt as a material transport medium in the deep Earth's interior	Institute of Geology and Mineralogy, Siberian Branch of the Russian Academy of Sciences
17.10–17.30	20	Kurths Juergen How Basin Stability Complements the Linear–Stability Paradigm	Institute of Applied Physics of the Russian Academy of Sciences
17.30–17.45	15	Feigin A.M. Optimal prognostic models of complex systems: advanced methods of time series analysis & their application to climate modeling	Institute of Applied Physics of the Russian Academy of Sciences
17.45–18.00	15	General discussion	
18.00			

POSTER REPORTS

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
1	Vasenev Ivan I.	Earth Science	RusFluxNet development on the basis of zonal stations of Laboratory of agroecological monitoring, ecosystem modeling and prediction (RTSAU)
2	Myasoedov Alexander	Earth Science	SAR wind retrieval: from Singlecore to Multicore/GPU computing
3	Pipko Irina	Earth Science	On carbon dioxide exchange over the East Siberian Arctic shelf – region of the highest biogeochemical contrasts
4	Pugach Svetlana	Earth Science	Tracing river runoff and DOC over the Laptev and East Siberian Shelves using in situ CDOM measurements
5	Shakhova Natalia	Earth Science	Top–down versus bottom–up estimates of methane fluxes over the East Siberian Arctic Shelf
6	Dudarev Oleg	Earth Science	Modern sedimentation on the East Siberian Arctic Shelf: (1999–2012)
7	Shakhova Natalia	Earth Science	Bubble transport of hydrate nuclei
8	Tokareva I.	Earth Science	Hydrological export of terrigenous carbon from catchments underlain by permafrost: Central Siberian case study
9	Gunar Alexey	Earth Science	Application of time–domain electromagnetic technology (TEM) for permafrost mapping on the Arctic shelf
10	Lutskii Denis S.	Earth Science	Crystallization technology of rare earth metals associated extraction from the products of the apatite concentrate sulfuric acid refining
11	Kirpotin S.N.	Earth Science	«West–Siberian Mires as Indicator and Regulator of Climate Change on Global Scale»
12	Manasyrov R.M.	Earth Science	Thermokarst lake waters across the permafrost zones of western Siberia
13	Mazirov I.M.	Earth Science	The impact of agricultural crops and soil treatment on a daily and seasonal dynamics of greenhouse gas emissions in agroecosystems of the Central region of Russia
14	Samardzic M.	Earth Science	LCA of the beef cattle Carbon Footprint in Central Russia
15	Tikhonova M.V.	Earth Science	The influence of recreational impact and mesorelief forms on ecological state of forest soils in megalopolis conditions
16	Andreeva I.V.	Earth Science	Prospects for the use of different varieties of spring rapeseed for biofuel production and contaminated soils phytoremediation
17	Dementyeva Svetlana O.	Earth Science	Development of new tools for forecasting of lightning activity for numerical weather prediction models
18	Bakhmetieva Nataliya	Earth Science	New opportunities of the API technique in studies of the ionosphere and atmosphere
19	Gavrilov A.S.	Earth Science	Construction of nonlinear dynamic modes by climate data
20	Rokotyay Nikita	Earth Science	Ground–based remote sensing of XCO2 and XCH4 at the Ural Atmospheric Station. Comparison with the GOSAT L2 retrievals
21	Vasilyev Vladimir	Earth Science	Processing of large–scale waste of mineral fertilizers to obtain multi–purpose products
22	Vdovin M.I.	Earth Science	Laboratory investigation of the heat and momentum exchange processes in the near–water atmospheric layer, depending on the various characteristics of the wind and waves
23	Lobanov Grigory V.	Earth Science	Prediction of the dynamics of floodplain–channel complexes (PRC) in the context of modern climate change: principles, methods, tools
24	Litvinova T.A.	Earth Science	Innovative resource saving technologies of oil–containing waste utilization
25	Kozlova Vera V.	Earth Science	SEASONAL GEOCHEMICAL MONITORING OF URBAN AREAS
26	Larina N.	Earth Science	Geochemistry of sedimentation in lakes of West Siberia: regional and zonal features
27	Larin S.	Earth Science	Geochemistry and elements of mapping in the wetlands of West Siberia
28	Monzikova Anna	Earth Science	Coastal zone wind field features based on SAR observations
29	Ilin Vladimir V.	Earth Science	RESEARCH OF MODERN EROSION AND SEDIMENTATION PROCESSES IN THE SHELF ZONE WITH USE OF THE LATEST TECHNOLOGIES FOR OPTIMIZATION OF METHODS OF SEARCH AND EXPLORATION OF MINERAL DEPOSITS
30	Volkova Irina I.	Life Science/ Earth Science	Landscape–ecological characteristics of the permafrost mire of Central Altai (south of Western Siberia)
31	Golovatskaya Evgeniya	Earth Science	STORAGES OF BIOMASS AND NET PRIMARY PRODUCTION AT OLIGOTROPHIC BOG
32	Polishchuk Vladimir	Earth Science	Forecast of field dynamics of thermokarst lakes in north of Western Siberia until 2100 based on geo–imitation modeling and climatic prognosis data
33	Filkov Alexander	Earth Science	Wood Samples Ignition by Dynamic Radiant Energy Flux
34	Alexey Zhelezov	Earth Science	Possible limits of hydrothermal activity on the northern Mid–Atlantic Ridge
35	Artem Klimchuk	Earth Science	Miniaturized Near Infrared Heterodyne Spectroradiometer for Monitoring CO2, CH4 and CO in the Earth Atmosphere



SCIENCE
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SECTIONS

Chemistry

September 18

St. Petersburg State University

Chemistry

10:30–16:35 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Nukolova Natalia			
10.30–10.55	25	Kabanov Alexander V. Polymeric Micelles – A Transformative Technology at Clinical Stage	Lomonosov Moscow State University
10.55–11.20	25	Sukhorukov Gleb B. Is it enough space in Microcapsule? Pack your stuff and track its delivery	Saratov State University
11.20–11.45	25	Klyachko Natalia L. Functional nanosystems for pharmacology and medicine	Lomonosov Moscow State University
11.45–12.15	COFFEE BREAKS		
Chairman: Antipina Maria N.			
12.15–12.40	25	Antipina Maria N. Polymer Multilayer Capsules for Intracellular Delivery	Institute of Materials Research and Engineering
12.40–13.05	25	Nukolova Natalia V. Delivery of drug-loaded nanoparticles conjugated with mAbs for treatment of brain tumor	Lomonosov Moscow State University
13.05–13.30	25	Khlebtsov B.N. Analytical and Theranostic Applications of Plasmonic Nanoparticles and Nanocomposites	Saratov State University
13.30–13.55	25	Vantskul Anton S. Design, synthesis and preliminary biological evaluation of novel potent MDM2/p53 small-molecule inhibitors based on oxidation reaction of tetrahydrocarboline derivatives	Moscow Institute of Physics and Technology (State University)
13.55–14.20	25	Zaitsev Sergei Supramolecular Nanosized Systems Based on the Photosensitive Crown-Ether Derivatives for Sensing Applications	Moscow State Academy of Veterinary Medicine and Biotechnology
14.20–15.20	LUNCH BREAKS		
15.20–15.45	25	Khanadeev Vitaly A. Random and colloid crystal-mediated assemblies of gold and gold/silver nanorods for SERS analysis	Saratov State University
15.45–16.10	25	Kharton Vladislav V. Structural, Magnetic and Isothermal Dilatometric Behavior of Oxidized YBa(Co,Fe) ₄ O _{7+d}	Institute of Solid State Physics of the Russian Academy of Sciences
16.10–16.35	25	Majouga Alexander Nanohybrid magnetic materials for biomedical application	Lomonosov Moscow State University

September 19

St. Petersburg State University

Chemistry

10:30–16:50 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Majouga Alexander			
10.30–10.55	25	Schroder Martin Structural and Dynamic Studies on Substrate Loaded Metal–Organic Framework Materials	Nikolaev Institute of Inorganic Chemistry, Siberian Branch of the Russian Academy of Sciences
10.55–11.20	25	Bahnemann Detlef W. Mechanism(s) of Photocatalytic Processes: Revisited!	Saint–Petersburg State University
11.20–11.45	25	Emeline Alexei V. Interplay between physical and chemical events in photoprocesses in heterogeneous systems	Saint-Petersburg State University
11.45–12.15	COFFEE BREAKS		
Chairman: Proserpio Davide M.			
12.15–12.35	25	Proserpio Davide M. Topological methods in crystal chemistry and materials science	Samara State University
12.35–13.00	25	Blatov V.A. A concept of expert system in materials science	Samara State University
13.00–13.25	25	Saleev V.A. Brighter than diamond: new sp ³ -carbon allotropes with large band gaps	Samara State University
13.25–13.50	25	Kabanov A.A. The investigation of conductivity of some solid electrolytes using DFT calculations	Samara State University
13.50–14.50	LUNCH BREAKS		
Chairman: Murzin Dmitry Yurevich			
14.50–15.15	25	Alexandrov Eugeny. V. New Efficient Crystallochemical Approaches in the Design of Coordination Networks	Samara State University
15.15–15.35	25	Samokhvalov Pavel Modelling of quantum dot growth: toward rational development of nanomaterials with predictable properties	National Research Nuclear University (Moscow Engineering Physics Institute)
15.35–16.00	25	Murzin Dmitry Y. Combined reactive distillation processes in oil refining and petrochemistry	Saint-Petersburg State Technological Institute (Technical University)
16.00–16.25	25	Aleksandrova J.V. Isobutane alkylation on the zeolitecontaining catalysts	Saint-Petersburg State Technological Institute (Technical University)
16.25–16.50	25	Vlasov Evgeny SZ–isobutane alkylation catalyst	Saint-Petersburg State Technological Institute (Technical University)

POSTER REPORTS

NUMBER	PRESENTING AUTHOR	SECTION	TITLE OF PRESENTATION
1	Galitskiy Vladimir A.	Chemistry	Preparation and investigation of calcium–phosphate particles containing superoxide dismutase for ophthalmology applications
2	Rudakovskaya Polina	Chemistry	Magnetic nanoparticles with different size shape and structure: synthesis and physico–chemical study
3	Vlasova Kseniia Yu.	Chemistry	Biomolecules can be released from MNPs surface through magnetic field exposures
4	Veselov M.M.	Chemistry	New immobilization technique for nanomechanical control of biochemical reactions via low–frequency magnetic field
5	Zolotarev P.N.	Chemistry	Search for the cleavable organic crystals: topological and energetic aspects
6	Golov A.A.	Chemistry	Geometric and energetic aspects of the formation of β -cyclodextrin molecular complexes
7	Saleh Gabriele	Chemistry	CHEMICAL BONDING IN HIGH PRESSURE ALKALI HALIDES
8	Mikheenkova A.E.	Chemistry	MICRO–ANALYSIS SYSTEM FOR NON–INVASIVE DIAGNOSTICS
9	Bandikova Angelina J.	Chemistry	2–Dithiophosphato–substituted aldehydes and their reactions with N–, N,N– and N,O–nucleophiles
10	Kirillina Julia S.	Chemistry	Interaction of O,O–dialkyldithiophosphoric acids with N–alkyl–2–halogenoaldimines
11	Lobanova M.S.	Chemistry	CHROMATO–DESORPTION MICROSYSTEMS FOR AIR MONITORING
12	Goryacheva O.A.	Chemistry	Quantum dots for application in immunochemical analysis
13	Ivanova Svetlana J.	Chemistry	Reactions of P(IV) acid esters with functionally substituted dibromomethylbenzenes
14	Merinova Olga	Chemistry	Aluminum removal from water by activated carbons
15	Tretiakova A.V.	Chemistry	Silanization of quantum dots for their hydrophilization
16	Zarkova I.S.	Chemistry	Fiber waveguides based optical biosensors with quantum dots as luminescent labels
17	Vostrikova A.V.	Chemistry	Luminescent quantum dots for visualization of microcapsules stability and degradation
18	Shishkova M.	Chemistry	Study of treatment Al ₂ O ₃ –carriers at synthesis Ni–containing catalysts
19	Nikitchenko N.V.	Chemistry	GC–MS determination of monosaccharides in biological fluids
20	Nekrasova Elizaveta	Chemistry	INFLUENCE OF ANTI–ICING REAGENTS ON THE POLLUTION OF SNOW COVER
21	Kislitsyn Pavel G.	Chemistry	High regioselectivity in aromatic amination of 3,4,5–tribromoisothiazole
22	Ivanov A.I.	Chemistry	IONIC AND ELECTRONIC TRANSPORT IN FLUORITE–LIKE Ce(La,Pr)O _{2–δ}
23	Kuritsyna I.	Chemistry	CONDUCTIVITY OF ZrO ₂ –BASED SOLID ELECTROLYTE MEMBRANES FOR FUEL CELL APPLICATIONS: AN OVERVIEW
24	Lyagin Ilya	Chemistry	Development of enzyme antidotes against organophosphorus compounds poisoning
25	Golovin Y.I.	Chemistry	Nanomechanical Approach to the Control of Biochemical Systems with Magnetic Nanoparticles by Extremely–Low Frequency Magnetic Field



SCIENCE
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SECTIONS

Humanities

September 18

St. Petersburg State University

Humanities

10:30–18:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Rey Marie-Pierre			
10.30–10.50	20	Rey Marie-Pierre Russian elites facing European norms and models in the 19th century: an overview of the question and some methodological comments	Ural Federal University
10.50–11.05	15	Bugrov K.D. "Original Innovations": the Actual Issues of Innovations Transfer (18th–20th centuries) in the Present-Day Historical Science	Ural Federal University
11.05–11.20	15	Palkin A.S. Elites of the Old Believers and European influence in 19th centuries	Ural Federal University
11.20–11.35	15	Gadzhiev Eldar Problems of the Theory of aspectual In Turkic Linguistics	Dagestan State Pedagogical University
11.35–11.50	15	Tikhonov S.S. The Trends of Ethnoarcheology Development in Russia	Omsk State University n.a. F.M. Dostoevskiy
11.50–12.20	COFFEE BREAKS		
Chairmen: Derevianko A. and Funk D.			
12.20–12.40	20	Derevianko Anatoliy P. The recent discoveries in the Altai and a new model of the origin of anatomically modern man (Homo sapiens)	Altai State University
12.40–13.00	20	Funk Dmitry A. A post-soviet case of anthropological turn	National Research Tomsk State University
13.00–13.15	15	Seregin N.N. Results and prospects of studying of early medieval Turk's funeral complexes in Central Asia	Altai State University
13.15–13.30	15	Nam I. Experience of interpretation of modern ritual of the Chinese tea ceremony	National Research Tomsk State University
13.30–13.45	15	Korusenko S.N. Ethnoestates Studies of the Siberian Tatars in the sources of the XVII–XX centuries	Omsk State University n.a. F.M. Dostoevskiy
13.45–14.00	15	Tataurov S.F. The Factors of Western Siberian Turkic Population Consolidation	Omsk State University n.a. F.M. Dostoevskiy
14.00–14.15	15	Bongsu Jeon Buddhism and the Ethnic identity of the Buryats –Based on oral life history of the Eastern Buryats	Chonbuk National University
14.15–14.30	15	Nam Irina Migrants in city: images, practices and strategies of adaptation	National Research Tomsk State University
14.30–15.30	LUNCH BREAKS		
Chairmen: Kovas Y. and Grigorenko E.			
15.30–15.50	20	Kovas Yulia Genetics for Education: genetically informative investigations into academic motivation, ability and achievement	National Research Tomsk State University
15.50–16.05	15	Voronin Ivan Genetic and Environmental aetiology of individual differences in academic achievement, ability and motivation in 7–12 year old school children	National Research Tomsk State University
16.05–16.25	15	Deich Boris Non-formal education in Russia: history and current status	Novosibirsk State Pedagogical University

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
16.25–16.45	20	Grigorenko Elena Leonidovna CHILD DEVELOPMENT IN THE CONTEXT OF GENOM– EN–VIROMENT	Saint-Petersburg State University
16.45–17.00	15	Naumova Oksana Epigenome and Parental Care	Saint-Petersburg State University
17.00–17.15	15	Muhamedrahimov Rifkat J. The Effect of Changes in Early Social–Emotional Experiences on the Development of Young Children in Orphanages	Saint-Petersburg State University
17.15–17.30	15	Klapwijk T.M. Graduate education: evoking excellence in others, the perspective of a physicist	Moscow State Pedagogical University
17.30–18.00		POSTER SESSION	
18.00		CULTURAL EVENT	

September 19

St. Petersburg State University

Humanities

10:00–18:00 Thematic section meetings (including coffee and lunch breaks)

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Weber Shlomo			
10.00–10.20	20	Weber Shlomo Identification and measurement of diversity	New Economic School
10.20–10.35	15	Dower Paul A history of resistance to privatization in Russia	New Economic School
10.35–10.50	15	Nikishina Elena Cultural diversity and bilateral trade	New Economic School
10.50–11.05	15	Avetisyan P.S. Integrating role of universities in a modern society	Russian-Armenian (Slavonic) University
11.05–11.20	15	Kharchenko Ekaterina V. Analysis of effectiveness of bodies of Executive power of the Russian Federation subjects	Southwest State University
11:20–11:50		COFFEE BREAKS	
Chairman: Casati Fabio			
11.50–12.10	20	Casati Fabio A Cross–Sectional Study on Happiness among Older Adults in Siberia	National Research Tomsk Polytechnic University
12.10–12.35	15	Nikitina S. Promoting Active Lifestyles	National Research Tomsk Polytechnic University
12.35–12.50	15	Kashapova E. Relationships between purchases and wellbeing of older and younger adults	National Research Tomsk Polytechnic University
12.50–13.05	15	Frolova Elena A Cross-Sectional Study on Happiness among Older Adults in Siberia	National Research Tomsk Polytechnic University
13.05–13.25	20	Biagioli Mario THE NEW SPACES OF INNOVATION	European University at Saint-Petersburg
13.25–13.40	15	Zemnukhova Liliia Russian IT community in London	European University at Saint-Petersburg
13.40–13.55	15	Shatokhina Liubava Russian Programmers in Finland: between Professional Self-Presentations and Lifestyle Narratives	European University at Saint-Petersburg
13.55–14.10	15	Profatillov Denis Crowdfunding as a Modern Tool for Innovative Projects Implementation.	Vitus Bering Kamchatka State University
14.10–15.10		LUNCH BREAKS	

TIME	DURATION OF PRESENTATION (MIN.)	PRESENTING AUTHOR, TITLE OF PRESENTATION	PRESENTING ORGANIZATION
Chairman: Thisse J.			
15.10–15.30	20	Thisse Jacques-Francois Economics of Cities	National Research University Higher School of Economics
15.30–15.45	15	Kokovin Sergey Models of Spatial Competition	National Research University Higher School of Economics
15.45–16.00	15	Kichko Sergey New Outlook on New Trade Theory	National Research University Higher School of Economics
16.00–16.15	15	Shvidkovsky Dmitry The Future of the Classical Architectural Tradition in Environmental Science	Moscow Institute of Architecture
16.15–16.30	15	Evdokimova Anastasya Evolution of transfer pricing: Russian and foreign practice	Moscow State University of Economics, Statistics and Informatics
16.30–16.45	15	Welzel Christian Happiness in Russia in comparative perspective	National Research University Higher School of Economics
16.45–17.00	15	Ponarin Eduard Russian Elite 1993–2012: a conservative shift	National Research University Higher School of Economics
17.00–17.15	15	Kostenko Veronika ATTITUDES TOWARDS GENDER EQUALITY AND PERCEPTION OF DEMOCRACY IN THE ARAB WORLD	National Research University Higher School of Economics
17.15–17.30	15	Sokolov Boris Country–Level Predictors of the Electoral Fortunes of Radical Right Parties: A Two–Part Mixed–Effects Model	National Research University Higher School of Economics
17.30–17.45	15	Almakaeva Anna Turst in police in comparative perspective	National Research University Higher School of Economics
18:00			

POSTER REPORTS

NUMBER	PRESENTING AUTHOR	EVENT	SECTION	REPORT FORM	TITLE OF PRESENTATION
1	Mogoutov Andrei	Science of the Future	Humanities	Poster report	Detecting scientific diaspora with methods of scientometrics
2	Korusenko M.A.	Science of the Future	Humanities	Poster report	Methodological search in the frames of the project "Ethnographo–Archeological Complex" (at the turn of XX – XXI centuries)
3	Matveev A.V.	Science of the Future	Humanities	Poster report	The Procedure of the Search for the Routes of the Moscow–Siberian Track of the XVIII – the beginning of the XX centuries
4	Krashennnikov Aleksei	Science of the Future	Humanities	Poster report	Placemaking and Public Space.
5	Evstigneeva N.B.	Science of the Future	Humanities	Poster report	The Archeology of the Russian Cities of the Western Siberia
6	Berezhnova M.L.	Science of the Future	Humanities	Poster report	The Study of the Burial Rite of the Russian Siberians: the Results and the Prospects
7	Knorre Alexei	Science of the Future Young Scientist Conference	Humanities	Poster report	Social Stratification of the Ukranian Software Developpers: programming languages, gender and salaries
8	Karelin Dmitry	Science of the Future	Humanities	Poster report	The Significance and Theoretical Aspects of Ancient Classical Monuments' 3D–reconstructions for Contemporary Classical Architecture
9	Tikhomirova M.N.	Science of the Future	Humanities	Poster report	Bukhara Ethnocultural Component in the Nutrition System of the Western Siberian Tatars
10	Butenko L.A.	Science of the Future	Humanities	Poster report	Tax analysis as a scientific field of financial analysis
11	Yurchenkova Nathalie	Science of the Future	Humanities	Poster report	Fiscal Consolidation: the consolidated budgets of subjects of the Russian Federation in Troubled Times
12	Kolmykova T.S.	Science of the Future	Humanities	Poster report	Contemporary sources of finance for innovation
13	Rybchinskaya Irina V.	Science of the Future	Humanities	Poster report	FUNCTIONS OF THE CENTRAL BANK IN MODERNIZATION OF BANKING SECTOR OF THE ECONOMY (BY THE EXAMPLE OF THE SOUTH OF RUSSIA)
14	Aksutin Yu.	Science of the Future	Humanities	Poster report	Estimation of post-Soviet citizens identities' transformations influence on interethnic relations

SIDE EVENTS

LABORATORY TOURS

Note: the number of places in small areas of the labs and resource centers is limited.

UNIVERSITY	LABORATORY	RESEARCH DIRECTIONS	LEADING SCIENTIST	ADDRESS
Saint Petersburg National Research University of Information Technologies Mechanics and Optics	Advanced Computing Lab	Information Technologies and Computing Systems	Peter Maria A. Sloot	Birzhevaja Linija, Vasilevskij Ostrov, 4.
Saint Petersburg National Research University of Information Technologies Mechanics and Optics	Laboratory of Metamaterials	Physics	Yuri S. Kivshar	Birzhevaja Linija, Vasilevskij Ostrov, 14
Federal State Budgetary Educational Institution of Higher Professional Education «Saint-Petersburg State University»	Laboratory of Geomorphological and Paleographic Studies of Polar Regions of World Ocean	Earth Sciences	Jörn Thiede	Srednij prospekt, Vasilevskij Ostrov, 41
Federal State Budgetary Educational Institution of Higher Professional Education «Saint-Petersburg State University»	Interdisciplinary Research Laboratory Named after P.I. Chebyshev	Mathematics	Stanislav K. Smirnov	14 Linija, Vasilevskij Ostrov, 29B
National Research University St. Petersburg State Polytechnical University	Laboratory Of Physics of Improved Containment of the Plasma of Tokamaks (Picpt)	Physics	Fridrich Wagner	Polytechnicheskaja Ulica, 29
National Research University St. Petersburg State Polytechnical University	Laboratory Of Molecular Neurodegeneration (Lmn)	Medical Sciences and Technologies	Ilya B. Bezprozvanny	Hlopina st., 14, Litera A
National Research University St. Petersburg State Polytechnical University	Scientific Research Centre «Nanobio»	Biotechnology	Mikhail A. Hodorkovski	Polytechnicheskaja st., 29
Federal State Budgetary Educational Institution of Higher Professional Education «Saint-Petersburg State University»	T.G. Dobzhansky Center of Genome Bioinformatics	Biology	Stephan J. O'brian	Srednij prospekt Vasilevskij Ostrov, 41A
St. Petersburg State Technological Institute (Technical University)	Laboratory of Molecular Pharmacology	Biotechnology	Melino Gennaro	Moskovskij prospekt, 26, Litera B
Federal State Budget Educational Institution of Higher Professional Education «Russian State Hydrometeorological University»	Satellite Oceanography	Earth Sciences	Chapron, Bertrand	Malohtinskij prospekt, 98

UNIVERSITY	LABORATORY	RESEARCH DIRECTIONS	LEADING SCIENTIST	ADDRESS
Saint-Petersburg National Research University of Information Technologies Mechanics And Optics	Laboratory of Anisotropic and Optically Active Nanostructures	Nanotechnologies	Yurii K. Gun'ko	Birzhevaja Linija, Vasilevskij Ostrov, 14
St. Petersburg State Technological Institute (Technical University)	Srl «Cell Biotechnology»	Biotechnology	Martin Sjeimus	Moskovskij prospect, 26, Litera B
Federal State Budgetary Educational Institution Of Higher Professional Education «Saint-Petersburg State University»	Laboratory of Mechanics of Advanced Bulk Nanomaterials for Innovative Engineering Applications	Material Engineering	Ruslan Z. Valiev	Peterhof, Universitetskij pr., 28
Federal State Budget Research Institution «A. F. Ioffe Institute of Physics and Engineering, Russian Academy of Sciences»	Laboratory of Ferroic Physics	Physics	Alexander K. Tagantsev	Polytechnicheskaja st., 26
Saint-Petersburg National Research University of Information Technologies Mechanics and Optics	International Institute «Photonics and Optical Information Technology»	Physics	Sergei A. Kozlov	Vasilevskij Ostrov, Kadetskaja Linija 3B
Saint Petersburg National Research University of Information Technologies Mechanics and Optics	International Laboratory «Advanced Photonic Materials and Technologies»	Physics	Nikolay V. Nikonorov	Birzhevaja Linija, 4
National Research University St. Petersburg State Polytechnical University	Stc «Mashtech»	Mechanics and Engineering	Maksim A. Odnobludov, Pavel N. Vopilovskij	Obrucevyh st., 1
National Research University St. Petersburg State Polytechnical University	Stc «Welding and Laser Technology»	Mechanics and Engineering	Gleb A. Turichin	Polytechnicheskaja st., 29
National Research University St. Petersburg State Polytechnical University	Laboratory Virtual Prototyping	Mechanics and Engineering	Nikolai N. Shabrov	Polytechnicheskaja st., 29
National Research University St. Petersburg State Polytechnical University	Center of Technical Creativity of Youth «Fab Lab»	Mechanics and Engineering	Igor E. Asonov	Polytechnicheskaja st., 29

ST. PETERSBURG STATE UNIVERSITY RESEARCH PARK

On 20-th of September tours to the resource centers of Saint-Petersburg State University Research Park and leading laboratories of the University, located in Peterhof will be organized for the participants of the conference.

11:10 - 12:00, Petrodvorets, Ulyanovskaya street, 1

The meeting with the Directorate of St. Petersburg state University Research Park (<http://researchpark.spbu.ru/research-park/centres>) and leading scientists – heads of research laboratories of the University, located in Peterhof. The meeting will allow you to get an idea about the resources of SPBU and cooperation possibilities. It will also help you to choose next laboratory tours.

Among speakers there are:

Ruslan Z. Valiev,

Director of the Institute of physics of advanced materials of Ufa state aviation technical University. Since 2013 – head of the Laboratory for Mechanics of Advanced Bulk Nanomaterials for Innovative Engineering Applications, SPSU, created with the support of «megagrant» of the Government of the Russian Federation.

Professor **Alexei V. Kavokin,**

University of Southampton (UK). Since 2011 – head of Spin Optics Laboratory at SPBU, created with the support of «megagrant» of the Government of the Russian Federation.

Professor **Yuri O. Chernov,**

Georgia Institute of Technology (USA). Since 2013 – head of the laboratory of biology of the amyloid of SPBU, created with the support of «megagrant» of the Government of the Russian Federation

12:00 – 12:30 Coffee break

12:30 - 14:30 Tours to the Research Park and leading laboratories of Saint-Petersburg State University.

You can choose one of the two complex routes:

- 1 • Magnetic Resonance Research Centre
- Laboratory of cluster catalysis
- Chemical Analysis and Materials Research Centre

-
- 2 • Magnetic Resonance Research Centre
 - Laboratory of cluster catalysis

Or you can visit two of the most interesting for you research centres of the Research Park of St. Petersburg State University:

- Centre for X-ray Diffraction Studies
- Centre for Physical Methods of Surface Investigation
- Centre for Thermogravimetric and Calorimetric Research
- Centre for Diagnostics of Functional Materials for Medicine, Pharmacology and Nanoelectronics
- Centre for Molecular and Cell Technologies

«OPTICAL MUSEUM»

Russia's first interactive educational exhibition «Optical museum» was created in the framework of the innovative educational programme of the National research University of information technologies, mechanics and optics.

The exposition is on the ground floor of the former house of the merchant Eliseev. Until 2003, the building was occupied by the laboratories of the State optical Institute. The exhibition was designed to show the magical world of optics, its history, present and prospects of development. It introduces a wide range of applications of optical and optical-information technology, stimulates further study of optics.

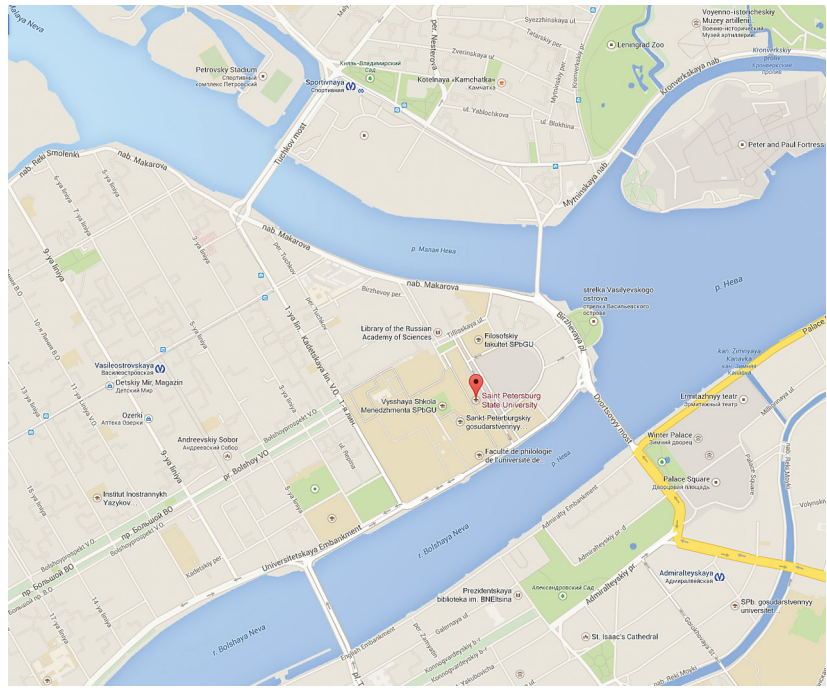
The main aim of the «Optical museum» - not only to impress, but also to help pupils and students of specialized institutes in their studies. For this purpose, there are workshops and show-rooms there. Small organized groups can get acquainted with the phenomena of interference, diffraction or light polarization. Teachers and students can use laser gaming, different educational booths and even a small planetarium.

USEFUL INFORMATION

CONFERENCE VENUES

Saint Petersburg State University

7-9, Universitetskaya nab.,
St. Petersburg, Russia



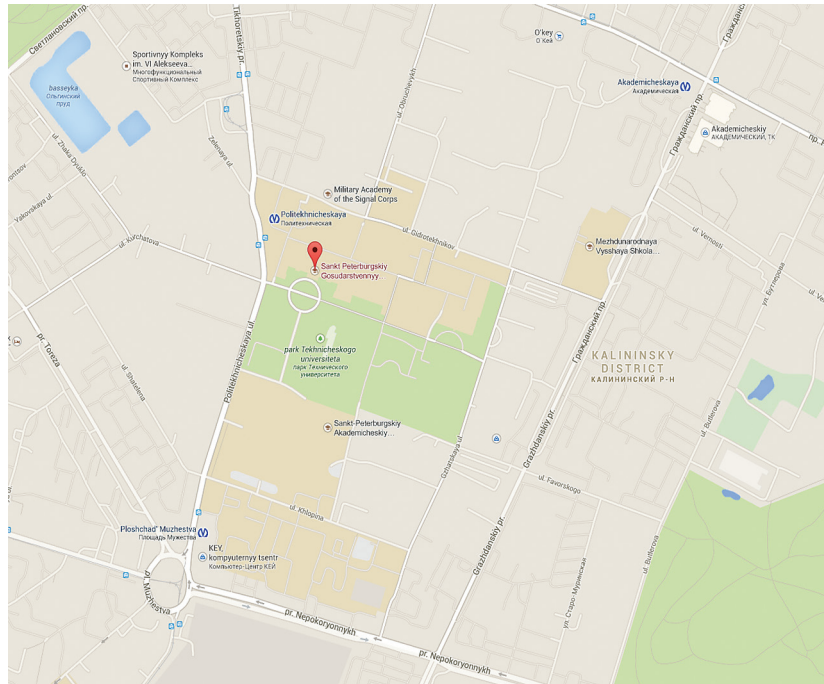
St. Petersburg national research University of Information technologies, mechanics and optics

Kronverkskiy pr, 49
St. Petersburg, Russia



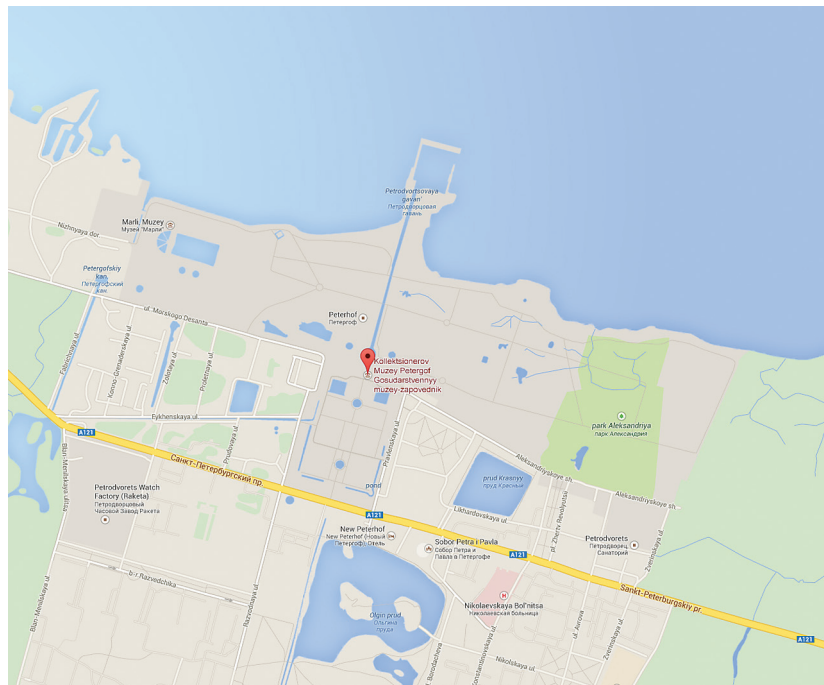
St. Petersburg State Polytechnical University

Polytechnicheskaya st., 29
St. Petersburg, Russia



Peterhof State Museum Reserve

Razvodnaya st., 2
St. Petersburg, Russia



NOTES

A series of horizontal dotted lines for writing notes.





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