

19.04 Friday

Lecture hall 406, MEPhI

09.00 - 10.00 Registration

Yurii Kulchin

10.00 - 10.30
(Institute of Automation and Control Processes with
Computation Center of the Far Eastern Branch of RAS, MEPhI)
Controll of the plants development process by light

Victor Timoshenko

10.30 - 11.00
(MSU, MEPhI)
Silicon nanoparticles for biomedical applications

Valentin Nikitaev

11.00 - 11.30
(MEPhI)
Decision support system in student sports

11.30 - 11.45 Break

Alexander Gusev

11.45 - 12.15
(MEPhI)
Heterostructures based on group III nitrides - preparation,
properties, application

Ivan Vasil'evskiy

12.15 - 12.45
(MEPhI)
Microwave photonics

Kogos Konstantin

12.45 - 13.15
(MEPhI)
Smartphone protection based on behavioral biometrics

13.15 - 14.00 Lunch

Youth Oral session 3

Lecture hall 406, MEPhI

14.00 - 17.00
Sections:
- Laser physics, solid state physics, optics and plasma physics
- IT technologies, intelligent systems, cyber security

17.15 - 18.15 Closing ceremony

20 апреля. Суббота

Departure of participants



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VIII International Youth Scientific School-Conference

«Modern Problems of Physics and Technology»

April 15-20, 2019

Information:

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E-mail: mppt@mephi.ru

115409, Moscow, Kashirskoe shosse, 31, MEPhI

<http://magistr.mephi.ru/school/>

PROGRAM



16.04 Tuesday**Assembly hall MEPhI**

09.00 - 10.00	Registration
10.00 - 10.10	Opening ceremony
10.10 - 10.30	Anton Fojtik (Czech Technical University in Prague, Czech Republic) Photo-Physics of Small Nano Particles NANO - The next dimension
10.30 - 11.00	Irina Zavestovskaya (MEPhI, P.N. Lebedev Physical Institute) Nuclear and radiation nanomedicine
11.00 - 11.30	Igor Nabiev (MEPhI, University of Reims Champagne-Ardenne, France) Control of biomolecular properties through the light - matter strong coupling
11.30 - 11.45	Break
11.45 - 12.15	Viktor Tsetlin (Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, MEPhI) From neurotoxic peptides and proteins to neuroreceptors
12.15 - 12.45	Fomin Vladimir (Institute for Integrative Nanosciences, Leibniz IFW Dresden) TOPOLOGY-DRIVEN ELECTRONIC, PHOTONIC AND PHONONIC EFFECTS IN NANOARCHITECTURES
12.45 - 13.15	Sergei Klimentov (MEPhI) The role of free electron dynamics in ablation of dielectric crystals by ultra-short laser pulses
13.15 - 14.00	Lunch
14.00 - 16.00	Poster session 1 Library reading room, 2nd floor, MEPhI Sections: - Physics, Engineering and Technologies for Bio-Medicine - Laser physics, solid state physics, optics and plasma physics - IT technologies, intelligent systems, cyber security
16.00 - 19.00	Youth Oral session 1 Conference hall, 3rd floor, MEPhI Sections: - Physics, Engineering and Technologies for Bio-Medicine - Electronics, Automation, Spintronics, Nanotechnology

17.04 Wednesday**Conference hall, 3rd floor, MEPhI**

09.00 - 10.00	Registration
10.00 - 10.30	Georgiy Tikhomirov (MEPhI) Nuclear energy: past, present, future
10.30 - 11.00	Boris Kalin (MEPhI) Tolerant nuclear fuel: achievements and prospects
11.00 - 11.30	Gennadiy Sarychev (Rosatom, MEPhI) The digital future of the nuclear industry in Russia
11.30 - 11.45	Break
11.45 - 12.15	Igor Yashin (MEPhI) "Muon Puzzle" in cosmic rays at very high energies
12.15 - 12.45	Vladimir Mikhailov (MEPhI) Search for dark matter in satellite experiments
12.45 - 13.15	Giovanni Ummarino (Politecnico di Torino, Italy) Disorder-Driven Transition from s± to s++ Superconducting Order Parameter in Proton Irradiated Ba(Fe1-xRhx)2As2 Single Crystals
13.15 - 14.00	Lunch
14.00 - 16.00	Poster session 2 Library reading room, 2nd floor, MEPhI Sections: - Nuclear physics and technology, particle physics, astrophysics and space physics - Nuclear, electrical engineering, mechanical engineering - Electronics, Automation, Spintronics, Nanotechnology
16.00 - 19.00	Youth Oral session 2 Conference hall, 3rd floor, MEPhI Sections: - Nuclear physics and technology, particle physics, astrophysics and space physics - Nuclear, electrical engineering, mechanical engineering

18.04 Thursday**Lecture hall 404, MEPhI**

09.00 - 10.00	Registration
10.00 - 10.30	Andrey Kyznetsov (MEPhI) Current problems of controlled thermonuclear fusion
10.30 - 11.00	Viktor Petrovskiy (MEPhI) The modern world of lasers and technology
11.00 - 11.30	Vladimir Reshetov (MEPhI) The quantum revolution is simply a shift in emphasis or the beginning of new technologies
11.30 - 11.45	Break
11.45 - 12.15	Peter Borisjuk (MEPhI) Creation of a nuclear metrological frequency standard of a new generation based on the anomalously low-lying nuclear isomeric state in the isotope Th-229
12.15 - 12.45	Vladimir Mironov (3D Bioprinting) Formative Biofabrication: From Scaffolds to Scaffolds
12.45 - 13.15	Giovanni Barbero (Politecnico di Torino, Italy) A simple model of ac hopping surface conductivity in ionic liquids
13.15 - 14.00	Lunch
13.00 - 14.00	School students registration
14.00 - 15.00	Plenary session of MEPhI
15.00 - 16.30	School students poster session
15.00 - 16.30	Excursion for School-Conference participants
16.30 - 17.30	Excursion for School students
17.30 - 18.00	Results of the school work competition. Awarding ceremony