Lomonosov Moscow State University Faculty of Physics

	Chair	Person	Research themes	Contacts
1	Computer Methods of Physics	Prof. Pyťev Yuri P., Prof. Chulichkov Alexey I.	 Methods of the theory of Computer-Aided Measurement Systems as a Measurement tools. Mathematical methods of image analysis and interpretation. 	<u>achulichkov@gmail.com,</u> yuri.pytyev@gmail.com
2	General Physics and Molecular Electronics	PhD Zhigunov Denis M.	 Plasmonic-induced local field enhancement and light manipulation in multilayered structures with silicon nanocrystals. Low temperature photoluminescence spectroscopy of GaAs quantum rings. 	dmzhigunov@physics.msu.ru
3	General Physics and Wave Processes	Ass.Prof. Kosareva Olga G.	Femtosecond laser pulse filamentation.	kosareva@physics.msu.ru
4	General Physics and Wave Processes	Prof. Zheltikov Alexei M.	Laser light propagation in microstructure fibers.	zheltikov@physics.msu.ru
5	General Physics and Wave Processes	Ass. Prof. Shkurinov Alexander P.	Thz-spectroscopy.	alex@lasmed.phys.msu.ru
6	Magnetism	Prof. Shalygina Elena E.	Investigation of morphology, magnetic and magneto-optical properties of multilayer structures.	<u>shal@magn.ru</u>
7	Magnetism	Prof. Perov Nikolai N.	Investigation of Huesler alloys.	perov@magn.ru
8	Marine and Inland Water Physics	Prof. Nosov Mikhail A.	Physics of tsunamis.	<u>nosov@phys.msu.ru,</u> <u>m.a.nosov@mail.ru</u>
9	Mathematics	Prof. Popov Viktor Yu.	Numerical Simulation of Magnetospheric and Space Plasma.	masterlu@physics.msu.ru
10	Mathematics	Prof.Nefedov Nikolai N.	Asymptotic and numerical methods of investigation for reaction-advection-diffusion systems with boundary and internal layers.	nefedov@phys.msu.ru

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11	Mathematics	Prof. Yagola Anatoly G.	Inverse problems of mathematical physics (it is possible collaboration with Professor Yamamoto Masahiro, Department of Mathematical Sciences, The University of Tokyo).	yagola@physics.msu.ru
12	Photonics and Microwave Physics	Ass. Prof. Zakharova Irina G., PhD., Komissarova Maria V.	Propagation of spatiotemporal optical waves in different nonlinear media. Analytical and numerical approaches.	zaharova@physics.msu.ru; komissarova@physics.msu.ru
13	Photonics and Microwave Physics	PhD. Elizarov Sergey G.	 Innovative motion control for stepper motors. High frequency power converters based on GaN FETs. FPGA based multicore architectures with lightweight threads and smart shared memory, see: http://maltsystem.com/en 	http://engineering.phys.msu.ru/en http://maltsystem.com/en elizarov@physics.msu.ru
14	Physics of polymers and crystals	Prof. Feldstein Mikhail M.	Pressure Sensitive Adhesives Based on Interpolymer Complexes in Solid State: Structure - Property Relationship.	feldhome@gmail.com; mfeld@ineos.ac.ru
15	Quantum Electronics	Prof. Fedyanin Andrey A.	1)Ultrafast magnetophotonics, ultrafast nonlinear optics of metamaterials. 2)Ultrafast plasmonics and magnetoplasmonics. 3)Nanophotonics of surface states in photonics crystals. 4)Photonic force microscopy - Optical Tweezers.	fedyanin@nanolab.phys.msu.ru

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16	Physics of polymers and crystals	Prof. Tribelsky Michael I.	 Granular gases as a "new state" of matter. Wave scattering in discrete and continuous media (including photonic crystals and light scattering by nanoclusters). Pattern formation and the transition to turbulence in nonequilibrium systems. Physical hydrodynamics and hydrodynamic stability. Growth of random surfaces. Statistical theory of networks and random graphs. Random walk theory. Statistical physics of polymer and granular systems. 	<u>mitribel@gmail.com</u>
17	Quantum Theory & High Energy Physics	Prof. Denisov Victor I.	 The gravitation theory, including investigation of Vaydia space-time, Fisher metric, weak gravitational vawes and other questions. Nonlinear electrodynamics of vacuum, including processes in the high magnetic fields of pulsars and magnetars and in the electromagnetic emission of powerfull lasers, such as ELI. 	<u>vid.msu@yandex.ru;</u>
18	Space Physics	Prof. Galkin Vladimir I.	1)New Methods for Extensive Air Shower Study Using Cherenkov Light and Charged Particle Characteristics. 2)New Methods in Ground-Based Ultra High Energy Gamma Ray Astronomy.	<u>v i galkin@mail.ru</u>