

LOMONOSOV MOSCOW STATE UNIVERSITY
FACULTY OF PHYSICS

WORKING PLAN

for the 2020/2021 academic year for students of the 1st year of the Master's program of the Faculty of Physics (Master's degree, full-time study)
student of the program " MM_PHYSICS "(direction 03.04.02 "Physics", MAG. prog. "Physics of Neutrinos and Fundamental Interactions of Elementary Particles")

DISCIPLINES	Full academic load per year	Semester # 1 (18 weeks)										Semester # 2 (17 weeks)												
		Academ. load per semester	self-study	in total	Classroom sessions					Reporting		Academ. load per semester	self-study	in total	Classroom sessions					Reporting				
					per week					test	exam				per week					test	exam			
					in total	lecture	seminar	laboratory	media						in total	lecture	seminar	laboratory	media					
Inter-faculty elective courses	72	36	12	24	1,3	1,3					test		36	12	24	1,4	1,4					test		
Disciplines of master's programs of choice: Machine learning for data processing, A.P.Kryukov; Data analysis in astroparticle physics, G.I.Rubtsov (semester # 1); Quantum field theory in curved spacetime, Yu.V.Grats; Modern gravity (Part 1), D.V.Galtsov (semester # 2)	144	72	36	36	2	1	1					exam		72	38	34	2	1	1					exam
Disciplines of master's programs of choice: Particle interactions in external fields, A. I.Studenikin, Quantum field theory under finite temperature, V.Ch.Zhukovsky (semester # 1); Neutrino mass generation models, K.L.Stankevich, Supersymmetry (Part 1), A.E.Kazantsev (semester # 2)	144	72	36	36	2	1	1					exam		72	38	34	2	1	1				test	
Disciplines of master's programs: Intruduction to neutrino physics (Part 1), A.I.Studenikin (semester # 1), Intruduction to neutrino physics (Part 2), A.I.Studenikin (semester # 2)	144	72	36	36	2	1	1					exam		72	38	34	2	1	1					exam
Disciplines of master's program: Quantum field theory (Part 1), V.Ch.Zhukovsky (semester # 1); Quantum field theory (Part 2), V.Ch.Zhukovsky (semester # 2)	144	72	36	36	2	1	1					exam		72	38	34	2	1	1					exam
Disciplines of master's programs: Theory of fundamental hadron interactions, A.V.Borisov (semester # 2)	72												72	38	34	2	1	1					test	
Disciplines of master's programs: Introduction to group theory, I.P.Volobuev (semester # 2)	72												72	38	34	2	1	1					test	
Disciplines of master's programs: Standard Model and its extensions, E.E.Boos (semester # 2)	72												72	38	34	2	1	1					test	
Special physics workshop. K.A.Kouzakov and A.I.Studenikin	108	108	36	72	4			4			test													
Modern problems of physics: Quantum collision theory, K.A.Kouzakov (semester # 1), Interaction of partcles and radiation with matter, K.A.Kouzakov (semester # 2)	180	108	72	36	2	1	1					exam		72	38	34	2	1	1				test	
Research work	756	432	432	until 29.12, 18 weeks							test		324	324	until 25.05, 17 weeks							test		
Foreign language for professional communication	180	72	36	36	2		2				test		108	74	34	2		2						exam
History and methodology of physics	72												72	38	34	2	2							exam
Total (general part of the plan)	2160	1044	732	312	17,3	6,3	7	4		4	5	1116	752	364	21,4	11,4	10					7	5	

Dean of the Faculty of Physics
Professor

N.N. Sysoev