DR. GRIGORY V. OSIPOV

UNIVERSITY	National Research Lobachevsky State University of Nizhny Novgorod
PROFICIENCY IN ENGLISH	Advanced
MAJOR OF PH.D. PROGRAMME	Mathematics & Mechanics
CODE OF PH.D. PROGRAMME	06.06.01
RESEARCH PROJECTS OF PROSPECTIVE SCIENTIFIC SUPERVISOR	**RESEARCH PROJECT TEAM LEADER:** • «Synchronization of localized structures in impulse neural networks», RFFR Grant 18-29-10068 (mk), 2019-2021. • «Dynamics of non-stationary oscillator networks», RSF Grant 19-12-00367, 2019-2021.
TOPICS FOR PROSPECTIVE PH.D. RESEARCH	• Dynamics of oscillatory media and its applications • Actual problems of neuroscience
 Research supervisor: **GRIGORY V. OSIPOV,** Professor, Doctor of Science, Physics & Mathematics (Lobachevsky State University of Nizhny Novgorod)	**RESEARCH AREA:** • Dynamics of oscillatory media and its applications **SUPERVISOR'S RESEARCH INTERESTS:** • Nonlinear dynamics, Synchronization, Mathematical Modeling, • Controlling Chaos, Pattern Formation, Theory of Bifurcations, • Computational Neuroscience, Parallel Programming **RESEARCH HIGHLIGHTS:** • Highly equipped labs & research environment, including Supercomputer «Lobachevsky». • Grant project involvement. • Cooperation with leading IT-companies (HUAWEI, INTEL, MERA, NVIDIA). • Prospective participation in international joint research projects (French & Italian universities). **SUPERVISOR'S SPECIFIC REQUIREMENTS:** • strong mathematical and good programming skills; • good proficiency in English; • motivation & creativity. **LATEST SUPERVISOR'S PUBLICATIONS:** • *Munyaev V.O., Smirnov L.A., Kostin V.A., Osipov G.V., Pikovskii A. Analytical approach to synchronous states of globally coupled noisy rotators // New Journal of Physics. № 2. V. 22. 2020. P. 023036.* • *Bolotov D.I., Bolotov M.I., Smirnov L.A., Osipov G.V., Pikovsky A. Twisted States in a System of Nonlinearly Coupled Phase Oscillators // Regular and Chaotic Dynamics. № 6. V. 24. 2019. P. 717-724.* • *Bolotov M.I., Munyaev V.O., Kryukov A.K., Smirnov L.A., Osipov G.V. Variety of rotation modes in a small chain of coupled pendulums // Chaos. № 29. V. 3. 2018. P. 033109.* • *Smirnov L.A., Osipov G.V., Pikovskii A.. Chimera patterns in the Kuramoto-Battogtokh model. // Journal of Physics A: Mathematical and Theoretical. № 50. 2017. P. 08LT01.* • *Kostin V.A., Osipov G.V. Transient and periodic spatiotemporal structures in a reaction-diffusion-mechanics system // Chaos. № 26. V. 1. 2016. P. 013101.*