Maxim I. Bolotov

Curriculum Vitae

Personal Data

Date of Birth	18 July 1992
Citizenship	Russia

Current positions
- **Ph.D Student**, Department of Control Theory and System Dynamics, Nizhny Novgorod State University, Russia.
- **Junior Researcher**, Department of Supercomputer Technologies of Computational Mathematics, The Research Institute of Supercomputing, Nizhny Novgorod State University, Russia.

Research Interests	Nonlinear dynamics, Synchronization, Mathematical Modeling, Computational Physics, Chimera State.
h-index (scopus)	1

Education

06.2016	**Master of Computer Science and Information Technology (with honors)**, *Nizhny Novgorod State University*, Nizhny Novgorod, Russia.
06.2014	**Bachelor of Information Technology (with honors)**, *Nizhny Novgorod State University*, Nizhny Novgorod, Russia.
06.2010	**Secondary education (with honors)**, *School 7*, Murom, Vladimir region, Russia.

Masters Thesis

Title	*Collective dynamics of the ensembles of oscillators coupled via common field*
Supervisors	Professor Grigory Osipov

Bachelors Thesis

Title	*Synchronization in ensembles of pulse coupled integrate-and-fire oscillators*
Supervisors	Professor Grigory Osipov

Positions

10.2016–	**Ph.D Student**, *Department of Control Theory and System Dynamics*, Nizhny Novgorod State University.
04.2016–	**Junior Researcher**, *Department of Supercomputer Technologies of Computational Mathematics*, The Research Institute of Supercomputing, Nizhny Novgorod State University.
10.2015–03.2016	**Junior Researcher**, *Laboratory of Dynamics of Complex Systems*, Department of Control Theory and System Dynamics, Nizhny Novgorod State University.
04.2014–09.2015	**Assistant**, *Laboratory of Dynamics of Complex Systems*, Department of Control Theory, Nizhny Novgorod State University.

Professional Experience

Visitor

10.2015	**Visiting Researcher**, *Potsdam University*, Statistical Physics and Theory of Chaos Group, Germany. Topic of the research: "Marginal chimera states".
08.2014	**Visiting Researcher**, *Potsdam University*, Statistical Physics and Theory of Chaos Group, Germany. Topic of the research: "Chimera states".

Conference

10.2016	**11-th International School on "Chaotic Oscillations and Pattern Formation"**, *Nizhny Novgorod, Russia*. Report type: poster. Topic of the report: "Collective dynamics of rotators coupled via common impulse field". Authors: **Bolotov M.I.**, Osipov G.V.
07.2016	**III International Conference "Dynamics, Bifurcations, and Strange Attractors"**, *Nizhny Novgorod, Russia*. Member of the organizing committee. Report type: poster. Topic of the report: "Collective dynamics of rotators coupled via common impulse field". Authors: **Bolotov M.I.**, Osipov G.V.
02.2016	**School-Conference "Nonlinear Waves-2016"**, *Nizhny Novgorod, Russia*. Report type: poster. Topic of the report: "Marginal chimera state at cross-frequency locking of neural networks". Authors: **Bolotov M.I.**, Osipov G.V., Pikovsky A.
12.2015	**International Conference on Dynamical Systems "Shilnikov Workshop-2015"**, *Nizhny Novgorod, Russia*. Report type: report. Topic of the report: "Marginal chimera state at cross-frequency locking of pulse-coupled neural networks". Authors: **Bolotov M.I.**, Osipov G.V., Pikovsky A.

12.2014	**International Conference on Dynamical Systems "Shilnikov Workshop-2014"**, *Nizhny Novgorod, Russia*.

Report type: report.
Topic of the report: "Synchronization in ensembles of pulse coupled neuronal integrate-and-fire oscillators".
Authors: **Bolotov M.I.**, Osipov G.V.

10.2014	**Russian-Dutch/EU Workshop on Computational Biomedicine**, *Amsterdam, Netherlands*.

Report type: poster.
Topic of the report: "Synchronization in ensembles of pulse coupled neuronal integrate-and-fire oscillators".
Authors: **Bolotov M.I.**, Osipov G.V., Pikovsky A.

Selected Publications

2016 M.I. Bolotov, G.V. Osipov. **Collective Dynamics of Rotators Coupled by a Common Pulsed Field.** Technical Physics Letters, Vol. 42, No. 12, pp. 1152-1154, 2016.

2016 M.I. Bolotov, G.V. Osipov, A.Pikovsky. **Marginal chimera state at cross-frequency locking of pulse-coupled neural networks.** Phys. Rev. E 93, 032202, 2016.

2015 Belykh V.N., Bolotov M.I., Osipov G.V. **Kuramoto Phase Model with Inertia: Bifurcations Leading to the Loss of Synchrony and to the Emergence of Chaos.** Modeling and Analysis of Information Systems. 2015;22(5):595-608.

Computer skills

Programming Languages	C++, Python, C#
Mathematical Packages	MatLab, Mathematica

Languages

Russian	**Mothertongue**
English	**Intermediate**