Mikhail Tikhonov

Lomonosov Moscow State University
Faculty of Physics
Department of Quantum Statistics and Field Theory

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Education

Lomonosov Moscow State University
Bachelor's degree, 2015 – present
Major: Theoretical Physics
GPA: 3.72(out of 4)

Research interests

exact solutions, analytical methods
Ising and Potts models, random field effects, quantum spin systems, probability
rarefied gas dynamics, lattice-like methods, blow-ups of solutions of pde

Research

2018 – present	**Bachelor's thesis**: Exact solution for a spin chain with quenched disorder Supervisor: prof. G.V. Koval
2017 – present	**Project:** Lattice Boltzmann Method in rarefied gas dynamics Supervisor: Dr. M. Yu. Timokhin
2018	**Project:** Simple non-linear problems based on Boltzmann equation Supervisor: prof. M. Torrilhon
2018	**Project:** Critical indexes of boundaries in Heisenberg chain Supervisor: prof. G.V. Koval
2017	**Term project:** Light scattering on nanoparticles Supervisor: Dr. Yu. V. Vladimirova Grade: A

Languages and Skills

English (fluent), Russian (native)
Python 3 (including basic data analysis tools), Wolfram Mathematica
LaTeX, Fortran, C and C++ with CUDA

Relevant courses

Functional analysis
Quantum lattice models (MSc program course)
Classical lattice models (MSc program course)

Publications

2019 Timokhin M. Yu., Tikhonov M.S. Numerical Simulations of Micro-Channel Devices with Lattice Boltzmann Method

Conferences, visits

31st International Symposium on Rarefied Gas Dynamics
23-27 July 2018, Glaglow, UK
International scientific conference of students and young scientists "Lomonosov"
9-13 April 2018, Moscow, Russia
Internship in mathCCES RWTH
25 Jan – 31 Mar 2018 Aachen, Germany

Teaching experience

General Physics
AESC MSU, 2018 – present
Teaching Assistant
Symmetry and Group Theory
Faculty of physics, 2018 – present
Teaching Assistant