

▷ Personal information

Name: TANASHKIN Aleksei
E-mail: tanashkin.alexey@gmail.com
Place of birth: Vladivostok, Primorye region, Russia
Date of birth: 17 September 1989 (36 years)
Nationality: Russian
Family status: married, one child



▷ Administrative status

Principal/Research

Status: Postdoc
Establishment: [Beijing Institute of Mathematical Sciences and Applications \(BIMSA\)](#)
No. 544, Hefangkou Village Huaibei Town, Huairou District Beijing 101408

▷ Professional experience

2025 till present Postdoc, [BIMSA](#), Beijing, China
2024 – 2025 present Researcher, [Pacific Quantum Center, FEFU](#), Vladivostok, Russia
2025 Associate Professor, [Advanced Engineering School, FEFU](#)
“Institute of Biotechnology, Bioengineering and Food Systems”
2025 Teacher of “Higher Mathematics” on program “Molecular biology”,
[Advanced Engineering School, FEFU](#)
2025 Teacher of “Mathematical methods of analysis of experimental data”
on program “Bioinformatics and data analysis”, [Advanced Engineering School](#)
2024 Teacher of “Mathematics” on program “Clinical and Experimental Pharmacy”,
[School of Medicine and Life Sciences, FEFU](#), Vladivostok, Russia
2024 Teacher of “Mathematics” on international programs
“Clinical and Experimental Pharmacy” and “Biomedicine”,
[School of Medicine and Life Sciences, FEFU](#), Vladivostok, Russia
2023 Teacher of “Medical Cybernetics” on international master program
“Leadership and Governance in Public Health”,
[School of Medicine and Life Sciences, FEFU](#), Vladivostok, Russia
2021–2022 Teacher of “Higher Mathematics” on program “Biotechnology”,
[School of Medicine and Life Sciences, FEFU](#), Vladivostok, Russia
2020–2023 Junior Researcher, [Pacific Quantum Center, FEFU](#), Vladivostok, Russia
2019 Junior Researcher,
[Laboratory of Physics of Living Matter, FEFU](#), Vladivostok, Russia

▷ Academic degrees

- Ph.D. 2023, [National Research Nuclear University MEPhI](#), Moscow, Russia
Thesis: The influence of non-trivial topology on vacuums of lattice gauge theories and spin systems”
Advisor: Vladimir Shevchenko
- Master 2018, [Far Eastern Federal University \(FEFU\)](#), Vladivostok, Russia
Thesis: The study of statistical Potts model with non-local interaction
Advisor: Vladimir Shevchenko
- Bachelor 2011, [Far Eastern Federal University \(FEFU\)](#), Vladivostok, Russia
Thesis: Methods of information encoding by means of combining error-control codes
Advisor: Inna Rudneva

▷ Scientific activity

Keywords

High energy physics; quantum field theory; quantum chromodynamics; numerical simulations of lattice gauge theories; topological objects in field theories: instantons, monopoles, vortices; non-perturbative phenomena; phase transitions in field theories; Casimir effect; statistical physics, computational physics.

Summary

Publications in peer-reviewed journals: 3
Total number of publications including conference proceedings: 11
Participation in international conferences: 7
Participation in conferences (total): 14
Patents: 7

Publications in peer-reviewed journals

- M. N. Chernodub, V. A. Goy, A. V. Molochkov and Alexey. S. Tanashkin, “*Boundary states and non-Abelian Casimir Effect in lattice Yang-Mills theory*,” [Physical Review D](#) **108**, 014515 (2023) [[arXiv:2302.00376](#)]
- M. N. Chernodub, V. A. Goy, A. V. Molochkov and A. S. Tanashkin, “*Casimir boundaries, monopoles, and deconfinement transition in (3+1)-dimensional compact electrodynamics*”, [Physical Review D](#) **105**, 114506 (2022) [[arXiv:2203.14922](#)]
- V. Shevchenko and A. Tanashkin, “*Non-local Potts model on random lattice and chromatic number of a plane*,” [Journal of Computational science](#) **61**, 101607 (2021) [[arXiv:2107.08508](#)]

Selected talks

- XVIth International conference “Quark Confinement and the hadron spectrum”, Cairns, Australia, 19 – 24 Aug 2024, “Boundary states and non-Abelian Casimir effect in lattice Yang-Mills theory”;
- XVth International conference “Quark confinement and the hadron spectrum”, Stavanger, Norway, 1 – 6 Aug 2022, “The influence of the Casimir effect on the vacuum structure of (3+1)-dimensional compact electrodynamics”;
- Virtual tribute to the conference “Quark confinement and the hadron spectrum”, 2 – 6 Aug 2021, “Nonlocal Potts model on random lattice and chromatic number of the plane”;

▷ Languages

- Russian – native speaker
- English – advanced (Cambridge Assessment English Certificate in Advanced English, level C1, Date of issue 19/08/2021, No. B6346760, Verification No. B5390744)