Bogdan Chuzhinov

Student at University of Vienna, Austria
bg.ch.mail@gmail.com — +43 676 941-86-84 — bogdan-chuzhinov.com

RESEARCH INTERESTS

Dynamical Systems in Biology, Computational Biology, Knot Theory

EDUCATION

University of Vienna, Austria   March 2025 — Present
Master's Program Mathematics (Specialization Biomathematics)

University of Vienna, Austria   October 2024 — Present
Master's Program Bioinformatics

Yandex School of Data Analysis, Moscow, Russia   September 2022 — Present
Data Science Program

Novosibirsk State University, Novosibirsk, Russia   September 2021 — July 2023
Master of Science in Mathematics (Specialization Geometry and Topology)   Cumulative GPA: 5.00/5.00
Thesis Title: Local Representations of Flat Virtual Braids by Automorphisms
of Free Group (on Russian)

Novosibirsk State University, Novosibirsk, Russia   September 2018 — July 2021
Bachelor of Science in Mathematics   Cumulative GPA: 4.95/5.00

ACADEMIC EXPERIENCE

Special Educational Scientific Center of Novosibirsk State University   Novosibirsk, Russia
Lecturer at the Department of Mathematics   September 2022 — July 2023
        The lectures were devoted to preparing graduates of a special school
at the university for additional entrance exams in mathematics at Moscow State University.

Laboratory of Topology and Dynamics, Novosibirsk State University   Novosibirsk, Russia
Laboratory assistant   August 2019 — December 2020

PUBLICATIONS

Journal papers
Published

- Bardakov, V., Chuzhinov, B., Emelyanenkov, I., Ivanov, M., Kozlovskaya, T., & Leshkov, V. (2024). Set-Theoretical Solutions of the n-Simplex Equation. *Siberian Advances in Mathematics*, 34(1), 1-40.
- Chuzhinov, B., & Vesnin, A. (2023). Representations of Flat Virtual Braids by Automorphisms of Free Group. *Symmetry*, 15(8), 1538. https://doi.org/10.3390/sym15081538

SELECTED COURSES

Relevant Master's Courses

- Stochastic Processes (3 ECTS)
- Weak Solutions of Mathematical Physics Equations (3 ECTS)
- Geometric Analysis (3 ECTS)
- Quasiconformal Analysis (4 ECTS)
- Nonstandard Analysis (4 ECTS)
- Structures on Manifolds (4 ECTS)

Relevant Bachelor's Courses

- Introduction in Nonlinear Dynamics (2 ECTS)
- Gas dynamics (3 ECTS)
- Hydrodynamics (3 ECTS)
- Ordinary Differential Equations (6 ECTS)
- Integrable System (4 ECTS)
- Theoretical Mechanics (7 ECTS)
- Equations of Mathematical Physics (8 ECTS)
- Analysis (28 ECTS)

Additional Courses

- Probability Theory (5 ECTS)
- Mathematical Statistics (4 ECTS)
- Riemannian Geometry (4 ECTS)
- Complex Analysis (6 ECTS)
- Functional Analysis (8 ECTS)

Courses of Yandex School of Data Analysis

- Bayesian Methods in Machine Learning
- Algorithms and Data Structures
- Machine Learning (including CV and NLP)
- Programming in Python
- Programming in Golang

LANGUAGES

Russian: Native
English: B2
German: C1

SKILLS

- **Programming:** Python (including NumPy, Pandas, Scikit-learn, Matplotlib, SciPy, PyTorch), C/C++ (basic).
- **Databases:** PostgreSQL, MongoDB.
- **Scientific Computations:** MATLAB, R.
- **Software:** Linux (including Bash-Scripting, Vim), Git, Latex, Docker.
- **Web Technologies:** Hugo, Astro.
- **Soft Skills:** Organization, Multitasking, Patience.

REFERENCES

Dr. Andrei Vesnin, Corresponding Member of the Russian Academy of Sciences
Chief Researcher at Sobolev Institute of Mathematics, Professor at Novosibirsk State University, Novosibirsk, Russia
E-mail: vesnin@math.nsc.ru
Scholar Profiles: Google Scholar

Dr. Valeriy Bardakov
Chief Researcher at Sobolev Institute of Mathematics, Professor at Novosibirsk State University, Novosibirsk, Russia
E-mail: bardakov@math.nsc.ru
Scholar Profiles: Research Gate