119234
Moscow
Leninskiye Gory 1, apt. 1404b
+7 (926) 666 59 61
dmmpav@gmail.com

Dmitrii Pavlov

Education

2016–2022 **Specialist (equivalent to Masters) in Mathematics**, *Moscow State University*, *Advisors: Yu.P. Razmyslov, G.A. Pogudin*.
GPA: 5.0/5.0
Related coursework: Advanced algebra, Introduction to computer algebra, Lie algebras and root systems, Algebraic theory of codes and linear recurrent sequences, Gröbner bases and elimination theory, Algebra of Sums-Of-Squares.

Employment

2021–2022 **Huawei Russian Research Institute, Moscow Optic Algorithm Laboratory**, *Junior research engineer*.
Research in digital signal processing, discrete optimization and numerical methods for solving Nonlinear Schrödinger equation.

2019–2021 **Moscow Center for Continuous Mathematical Education**, *Editor of interactive courses and textbooks in mathematics*.

2019–2020 **Yandex.Math**, *Consultant of interactive courses in mathematics*.

2018–2019 **Mathematical Circle of MSU Faculty of Mechanics and Mathematics**, *Tutor*.

Publications

On realizing differential-algebraic equations by rational dynamical systems
D. Pavlov and G. Pogudin, ACM International Symposium on Symbolic and Algebraic Computation (ISSAC), doi:10.1145/3476446.3535492, 2022.

From algebra to analysis: new proofs of theorems by Ritt and Seidenberg
D. Pavlov, G. Pogudin and Yu. Razmyslov, Proceedings of American Mathematical Society, `https://doi.org/10.1090/proc/16065`, 2022.

Presentations

12 Apr 2022 **Realizability of algebraic differential equations by rational dynamical systems**, *Algebra and Model Theory Seminar, Moscow State University*.

8 Dec 2020 **Analytic spectrum of differential $\mathbb{C}$-algebra with several commuting derivations**, *Algebra and Model Theory Seminar, Moscow State University*.

28 Mar 2020 **Differentials of morphisms of algebraic groups**, *Algebraic Transformation Groups Seminar, Moscow State University*.

8 May 2019 **Differentially flat systems**, *Algebra and Model Theory Seminar, Moscow State University*.

6 Oct 2018 **Structure theory of Lie algebras**, *Algebraic Transformation Groups Seminar, Moscow State University*.

Computer skills

Languages: Python, Sage, SQL, C/C++

Software: LaTex, GitLab, Linux

Language proficiency

Russian (native), English (fluent), French (upper-intermediate)

Awards on math olympiads

2016 **MSU Olympiad in mathematics**, *First Prize*.

2016 **ITMO University Olympiad in mathematics and informatics**, *Second Prize*.

2014, 2016 **Regional stage of Russian National Olympiad in mathematics**, *Second Prize*.

2015, 2016 **HSE Olympiad in mathematics**, *Second Prize*.

2016 **MIPT Olympiad in mathematics**, *Second Prize*.