Jakub Záthurecký

Lector

30 March 1996

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Research interests

Applications of pure mathematics to investigation of differential equations which can be used to describe real-world phenomena such as models in neuroscience: Dynamical systems, Differential equations, Bifurcation theory, Numerical methods.

Education

2019-2024 Ph.D. in Applied Mathematics — Masaryk University
Thesis title: Dynamical models in neuroscience

2017-2019 Master of Algebra and Discrete Mathematics — Masaryk University
Thesis title: Model theory

2014-2017 Bachelor in Pure Mathematics — Masaryk University
Thesis title: Stone duality

Employment

2024-now Lector II, Department of Mathamatics and Statistics, Faculty of Science, Masaryk University

Teaching

Faculty of Science, MU: Numerical Methods (seminar tutor), Probability and Statistics (seminar tutor), Continuous Deterministic Models (seminar tutor)

Faculty of Informatics, MU: Linear Models (seminar tutor), Continuous Models and Statistics (seminar tutor), Differential and Integral Calculus (seminar tutor), Numerical Methods (seminar tutor)

Faculty of Medicine, MU: Mathematics for Embryologists, Mathematics for Optometrists

Supervision

Master thesis (1 consultant), Bachelor thesis (7 readings)

Conferences

2022 CHAOS Conference, Athens
2021 CHAOS Conference, Athens (virtual)

Academic stays

2021 University of Twente, 2 weeks study stay
2023 Hasselt University, 3 weeks study stay

Selected publications

2023 Period-Doubling Bifurcation of Cycles in Retarded Functional Differential Equations. Journal of Dynamics and Differential Equations. Springer, ISSN 1040-7294. doi:10.1007/s10884-023-10249-3.

Interests

Tourism, music, literature, mathematics.