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PERSONAL DATA	Date and place of birth:	28.11.1995 Prague, Czech Republic
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INTEREST	Partial differential equations, fluid dynamics, dynamical systems, attractors and their dimension, regularity
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EDUCATION	Charles University, Faculty of Mathematics and Physics 2020–2025: Doctoral (Ph.D.) degree, Mathematical analysis; Thesis: Analysis of open systems in continuum thermodynamics Supervisor: Dalibor Pražák, Charles University Opponents: Miroslav Bulíček, Charles University Maurizio Grasselli, Politecnico di Milano 2018–2020: Master's degree, Mathematical analysis, passed with honors; Thesis: Fixed point theorems in the theory of differential equations 2015–2018: Bachelor's degree, General mathematics; Thesis: On impossibility of elementary integration
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PROJECTS	Grant number 20-11027X of Grant agency of Czech Republic (Mathematical analysis of partial differential equations describing far-from-equilibrium open systems in continuum thermodynamics); member of the team 2020–2025 Principal investigator: Miroslav Bulíček
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TALKS	<i>Conference</i> The 14th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Abu Dhabi, UAE, December 2024 <i>Conference</i> Modelling, partial differential equations analysis and computational mathematics in material sciences, Prague, Czech Republic, September 2024 <i>Lecture</i> Seminar on PDE's, Université de Poitiers, France, September 2024 <i>Workshop</i> EVEQ 2024 NextGen, Prague, Czech Republic, June 2024 <i>Workshop</i> Mathematical Aspects of Fluid Flows, Kácov, Czech Republic, May 2024 <i>Conference</i> The 13th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Wilmington, NC USA, June 2023 <i>Workshop</i> Recent trends in mathematical modelling, Kácov, Czech Republic, December 2022 <i>Conference</i> EQUADIFF15, Brno, Czech Republic, July 2022 <i>Conference</i> 8th European Congress of Mathematics, Portorož, Slovenia, June 2021
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PEDAGOGICAL EXPERIENCE

Tutorials/Seminars

- Ordinary differential equations I (MFF UK) – Third-year course covering qualitative analysis and theory of linear and Lyapunov stability. In 2024/25
- Mathematics I & II (IES FSV UK) – Standard first-year courses covering differential and integral calculus of one or more variables. In 2021/22, 2022/23 (Golden course award), 2023/24 (in English), 2024/25
- Linear algebra (CTU in Prague) – Standard course covering bases, properties of matrices, systems of linear equations, Jordan normal form. In 2019/20

LIST OF PUBLICATIONS

- [1] M. Zelina. Analysis of open systems in continuum thermodynamics. Ph.D. thesis, Faculty of Mathematics and Physics, Charles University, Prague, 2025. <https://dspace.cuni.cz/handle/20.500.11956/204651?locale-attribute=en>
- [2] D. Pražák and M. Zelina. On L^p -semigroup to Stokes equation with dynamic boundary condition in the half-space. arXiv:2312.04478v3, 2025. DOI 10.48550/arXiv.2312.04478
- [3] M. Zelina. On the attractor for 2D Navier–Stokes-like system with the dynamic slip boundary condition in a channel. arXiv:2408.13245, 2024. DOI 10.48550/arXiv.2408.13245
- [4] D. Pražák and M. Zelina. On the uniqueness of the solution and finite-dimensional attractors for the 3D flow with dynamic slip boundary condition. Differential Integral Equations, 37(11-12):859–880, 2024. DOI 10.57262/die037-1112-859
- [5] D. Pražák and M. Zelina. Strong solutions and attractor dimension for 2D NSE with dynamic boundary conditions. Journal of Evolution Equations, 24(2):44, 2024. DOI 10.1007/s00028-024-00948-9
- [6] D. Pražák and M. Zelina. On linearization principle for Navier–Stokes system with dynamic slip boundary condition. Communications on Pure and Applied Analysis, 22(5):1456–1476, 2023. DOI 10.3934/cpaa.2023034