

## Roman Lávička: Curriculum Vitae

**Born:** February 8, 1972, Sušice, Czechoslovak Republic

**Nationality:** Czech

**Address:**

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**Education and academic qualifications:**

1990 - 1995 Masters degree in mathematics,  
Faculty of Mathematics and Physics, Charles University, Prague  
1998 Ph.D., Faculty of Mathematics and Physics, Charles University, Prague  
2012 Associate Professor, mathematics – mathematical analysis,  
Faculty of Mathematics and Physics, Charles University, Prague

**Employment:**

1998 - 2012 Assistant Professor,  
Faculty of Mathematics and Physics, Charles University, Prague  
2013 - Associate Professor, complex analysis,  
Faculty of Mathematics and Physics, Charles University, Prague

**Scientific and research activities:**

My main field of research is mathematical analysis. My most important contributions concern Clifford analysis, in particular, constructions of Gelfand-Tsetlin bases for polynomial solutions of invariant differential equations.

publication activity: 1 monograph, 49 publications, WOS: citations 261, 166 without self-citations, h-index 9

**Projects:**

2017 - 2019 standard project 17-01171S of the Czech Science Foundation (GACR),  
"Invariant differential operators and their applications in geometric  
modelling and control theory", principal investigator (PI)  
2020 - 06/2023 standard project 20-11473S of GACR, "Symmetry and invariance in  
analysis, geometric modelling and control theory", PI

**Visiting positions:**

National University of Ireland, Maynooth, 2004, 4 months;  
Ghent University, Ghent, Belgium, 2019, 1 month.

shorter research visits [sometimes repeated] at universities in:

Ghent, Belgium [9]; Maynooth, Ireland [3]; Milano, Italy [4]; Aveiro, Portugal

**Pedagogical activities:**

1998 - real and complex analysis, functional analysis, Riemann surfaces, Lie  
groups and algebras

**University activities:**

- 1998 - 2012 Scientific Secretary, Mathematical Institute of Charles University, Prague
- 2012 - 2018 Executive Editor of *Commentationes Mathematicae Universitatis Carolinae* (CMUC)
- 2019 - Editor of the journal CMUC
- 2019 - Head of Division of analysis and geometry, Mathematical Institute of Charles University, Prague
- 2021 - Editor of the journal *Complex Analysis and Operator Theory*
- 2023 - Editor of the journal *Advances in Applied Clifford Algebras*

**Most important publications:**

1. R. Lávička, V. Souček and P. Van Lancker, Orthogonal basis for spherical monogenics by step two branching, *Ann. Glob. Anal. Geom.* 41 (2012) (2), 161-186.
2. S. Bock, K. Gürlebeck, R. Lávička and V. Souček, The Gelfand-Tsetlin bases for spherical monogenics in dimension 3, *Rev. Mat. Iberoamericana* 28 (2012) (4), 1165-1192.
3. R. Lávička, Complete orthogonal Appell systems for spherical monogenics, *Complex Anal. Oper. Theory* 6 (2012) (2), 477-489.
4. F. Brackx, H. De Schepper and R. Lávička, Generalized Taylor Series in Hermitian Clifford Analysis, *J. Math. Anal. Appl.* 421 (2015), 1531-1545.
5. F. Colombo, R. Lávička, I. Sabadini and V. Souček, The Radon transform between monogenic and generalized slice monogenic functions, *Math. Ann.* 363 (2015), 733-752.
6. R. Lávička, D. Šmíd, Fischer decomposition for polynomials on superspace, *J. Math. Phys.* 56, 111704 (2015).
7. R. Howe, R. Lávička, S.T. Lee, V. Souček, A reciprocity law and the skew Pieri rule for the symplectic group, *J. Math. Phys.* 58 , 031702 (2017).
8. F. Brackx, H. De Schepper, D. Eelbode, R. Lávička and V. Souček, Fischer decomposition for the symplectic group, *J. Math. Anal. Appl.* 458 (2018), 831-848.
9. R. Lávička, V. Souček and W. Wang, Massless field equations for spin 3/2 in dimension 6, *J. Geom. Phys.* 206 (2024), 105341.
10. R. Lávička, Branching laws for spherical harmonics on superspaces in exceptional cases, *J. Phys. A: Math. Theor.* 57 (2024), 105201.

Prague, February 21, 2025