

Dmitri Yafaev: Curriculum Vitae

Born on 2 January 1948 in Oufa (U.R.S.S.); **Nationality:** Russian and French

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Professional history:

- Ph.D.: 1973, University of Leningrad.
- Lecturer, University of Leningrad, 1973-1977.
- Researcher and Senior Researcher, St.Petersburg Branch of the Steklov Mathematical Institute, 1977-1990.
- Associate Professor, University of Nantes, 1990-1992.
- Professor, University of Rennes-1, since 1992.

Editorial membership: “Journal of spectral theory”, “Integral equations and operator theory”, “Problems of mathematical analysis” (Springer), “Functional analysis and its applications”.

Research interests: Spectral theory of differential operators; spectral properties of scattering matrix; long-range scattering theory; magnetic Hamiltonians.

Books:

1. Mathematical Scattering Theory (General Theory), AMS, 1992, Providence, Rhode Island.
2. Scattering theory: some old and new problems, Lecture Notes Math., v. 1735, 2000, Springer-Verlag.
3. Mathematical Scattering Theory (Analytic Theory), AMS, 2010, Providence, Rhode Island.

Selected recent papers:

1. Diagonalizations of two classes of unbounded Hankel operators, Bulletin Math. Sciences **4**, N 4, 175-198, 2014.
2. Criteria for Hankel operators to be sign-definite, Analysis & PDE **8**, N 1, 183–221, 2015.
3. On finite rank Hankel operators, J. Funct. Anal. **268**, 1808–1839, 2015.
4. Quasi-Carleman operators and their spectral properties, Integral Eq. Oper. Theory **81**, 499–534, 2015.
5. Asymptotic behaviour of eigenvalues of Hankel operators (with A. Pushnitski) Int. Math. Res. Notices **2015** (22), 11861-11886, 2015.
6. Quasi-diagonalization of Hankel operators, ArXiv: 1403.3941 (2014) to appear in J. d'Analyse Mathématique.
7. Spectral and scattering theory of self-adjoint Hankel operators with piecewise continuous symbols (with A. Pushnitski), J. Oper. Theory **74**, 101-139, 2015.
8. Localization principle for compact Hankel operators (with A. Pushnitski), J. Funct. Anal. **270**, 3591-3621, 2016.
9. Best rational approximations of functions with logarithmic singularities (avec A. Pushnitski), Constructive Approximation, DOI 10.1007/s00365-016-9347-1, 2016.
10. Unbounded Hankel operator and moment problems, Integral Eq. Oper. Theory, **85**, 289-300, 2016.
11. On semibounded Toeplitz operators, arXiv: 1603.06229 (2016), to appear in J. Oper. Theory.