

Ari Laptev

PUBLICATIONS

Journals

115. (jointly with Th.Hoffmann-Ostenhof), *Hardy inequality for antisymmetric functions*, submitted.
114. (jointly with T.Weth), *Spectral properties of the logarithmic Laplacian*, accepted by Analysis and Mathematical Physics.
113. (jointly with D.Guzu and L.Kapitanski), *Hardy inequalities for discrete magnetic Dirichlet forms*, accepted by Pure and Applied Functional Analysis.
112. *On factorization of a class of Schrödinger operators*, Accepted by Complex Variables and Elliptic Equations.
111. (jointly with D.Bonheure, J.Dolbeault, M.J.Esteban and M.Loss), *Inequalities involving Aharonov-Bohm magnetic potentials in dimensions 2 and 3*, Reviews in Mathematical Physics, **33**: 2150006 (2021), 1–29.
110. (jointly with A.Ilyin and S.Zelik), *On Lieb-Thirring constant on the sphere and on the torus*, Accepted by JFA.
109. (jointly with L.Fanelli, D.Krejcirik and L.Vega) *On the improvement of the Hardy inequality due to singular magnetic fields*, CPDE, published on line May 13, 2020.
108. (jointly with F. Ferrulli), *Complex eigenvalue bounds for a Schrödinger operator on the half line*, Rend. Lincei Mat. Appl. **31** (2020), 1–13.
107. (jointly with D. Guzu and Th. Hoffmann-Ostenhof), *On a Class of Sharp Multiplicative Hardy Inequalities*, St. Petersburg Math. J., **32**:3 (2020), 180-190.
106. (jointly with L. Schimmer and L. Takhtajan), *Weyl asymptotics for perturbed functional difference operators*, JMPH **60**, 103505 (2019) (Special issue: XIXth International Congress on Mathematical Physics).
105. (jointly with A.Ilyin and S.Zelik), *On Lieb-Thirring constant on the torus*, Mat. Zametki, 106:6 (2019), 946-950.
104. (with A.Velicu) *Spectral inequalities for a class of integral operators*, Journal of Mathematical Sciences, 242:2 (2019), 214-226.
103. (jointly with A.Ilyin), *Lieb--Thirring inequalities on the sphere*, St. Petersburg Math. J., **31**:3 (2019), 116-135.

102. (jointly with O.Ibrogimov and D.Krejcirik), *Sharp bounds for eigenvalues of biharmonic operators with complex potentials in low dimensions*, accepted by *Mathematische Nachrichten*.
101. (jointly with D.Bonheure, J.Dolbeault, M.J.Esteban and M.Loss), *Symmetry Results in Two-Dimensional Inequalities for Aharonov–Bohm Magnetic Fields*, *CMP*, (2019) DOI 10.1007/s00220-019-03560-y.
100. (jointly A.Hassannezhad) *Eigenvalue bounds of mixed Steklov problems*, *Communications in Contemporary Mathematics*, (2019) Vol. 22, No. 02, 1950008 (2020) doi.org/10.1142/S0219199719500081.
99. (jointly with R.L.Frank), *Bound on the number of negative eigenvalues of two-dimensional Schrödinger operators on domains*, *St. Petersburg. Math. J.*, **30**:3 (2018), 573-589.
98. (jointly with A.Ilyin), *Berezin–Li–Yau inequalities on domains on the sphere*, *JMAA*, **473** (2) (2019), 1253--1269.
97. (jointly with M.Ruzhansky and N. Yessirkegenov) *Hardy inequalities for Landau Hamiltonian and for Baouendi-Grushin operator with Aharonov-Bohm type magnetic field, Part I*, *Math. Scand.*, **125**, n. 2 (2019), 239-269.
96. (jointly with F. Ferrulli and O.Safronov), *Eigenvalues of the bilayer graphene operator with a complex valued potential*, *Anal.Math.Phys.* **9**, 1535–1546 (2019) doi:10.1007/s13324-018-0262-4.
95. (jointly with J.Dolbeault, M.J.Esteban and M.Loss), *Magnetic ring*, *Journal of Mathematical Physics* **59**, 2018.
94. (jointly with J.Dolbeault, M.J.Esteban and M.Loss), *Interpolation inequalities and spectral estimates for magnetic operators*, *Annales Henri Poincaré*, **19** (5) (2018) 1439--1463.
93. (jointly with A.Velicu), *Bound States of operators with Heisenberg sub-Laplacian*, *EMS Series of Congress Reports*, 381-387 (2018).
92. (jointly with E. Korotyaev), *Trace formulae for discrete Schrödinger operators with complex-valued potentials*, *Bull. Math. Sci.* (2018) **8**:453--475.
91. (jointly with A.Peicheva and A.Shlapunov), *Finding eigenvalues and eigenfunctions of the Zaremba problem for the circle*, *Complex Anal. Oper. Theory*, **11**, no. 4, (2017). 895--926.
90. (jointly with S. Maad), *Perturbations of embedded eigenvalues for a magnetic Schrödinger operator on a cylinder*, *J. Math. Phys.* **58**, no. 1 (2017), 17 p.
89. (jointly with E. Korotyaev), *Trace formulas for a discrete Schrödinger operator*, *Funct. Anal. Appl.* **51**, no 3 (2017), 225--229.

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85. (jointly with L. Schimmer and L. Takhtajan), *Weyl-type asymptotics and bounds for the eigenvalues of functional-difference operators for mirror curves*, Geom. Funct. Anal., **26** (2016) 288--305.
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78. (jointly with A. Ilyin and S. Zelik), *Sharp interpolation inequalities for discrete operators and applications*, Bull. Math. Sci. **5**, no. 1 (2015), 19—57.
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62. Nina N. Uraltseva. *On the occasion of her 75th birthday*, Problems in mathematical analysis. no. 40. J. Math. Sci. (N. Y.) **159** (2009), no. 1, 1-3.
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49. (jointly with E. Langmann and C. Paufler), *Singular factorizations, self-adjoint extensions and applications to quantum many-body physics*, J.Phys. A: Math.Gen. **39** (2006), 1057-1071.
48. Editor of the Proceedings of the 4th Congress (4ECM) in Stockholm, 2004 European Mathematical Society (EMS), Zurich, 2005, 881 pp.
47. (jointly with S.Naboko and O.Safronov), *Absolutely continuous spectrum of Schrödinger operators with slowly decaying and oscillating potentials*, Comm. Math. Ph., **253** (2005), 611-631.
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Books edited

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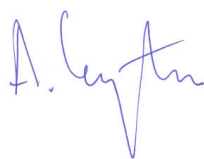
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A. Laptev

