

Ari Laptev
PUBLICATIONS

Journals

109. (jointly with D. Guzu and Th. Hoffmann-Ostenhof), *On a Class of Sharp Multiplicative Hardy Inequalities*, accepted by Algebra&Analysis.
108. (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)
107. (jointly with A.Ilyin and S.Zelik), *On Lieb-Thirring constant on the torus*, Mat.Zametki, 106:6 (2019), 946-950.
106. (with A.Velicu) *Spectral inequalities for a class of integral operators*, Journal of Mathematical Sciences, 242:2 (2019), 214-226.
105. (jointly with A.Ilyin), *Lieb--Thirring inequalities on the sphere*, Algebra&Analysis. 31:3 (2019), 116-135.
104. (jointly with L.Fanelli, D.Krejcirik and L.Vega) *On the improvement of the Hardy inequality due to singular magnetic fields*, CPDE accepted.
103. (jointly with F. Ferrulli), *Complex eigenvalue bounds for a Schrödinger operator on the half line*, accepted by Rendiconti Lincei - Matematica e Applicazioni
102. (jointly with O.Ibrogimov and D.Krejcirik), *Sharp bounds for eigenvalues of biharmonic operators with complex potentials in low dimensions*, submitted.
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) 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**, No. 3 (2019), 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.
- 88 (jointly with M.Ashbaugh, F.Gesztesy, M.Mitrea and S.Sukhtaiev), *A Bound for the Eigenvalue Counting for Krein--von Neumann and Friedrichs Extensions*, Adv. Math. **304** (2017), 1108--1155.
87. (jointly with L. Kapitanski), *On continuous and discrete Hardy inequalities*, J. Spectr. Theory, **6**, no. 4 (2016), 837--858.
86. (jointly with R.Frank and O. Safronov), *On the number of eigenvalues of Schrödinger operators with complex potentials*, J. Lond. Math. Soc., II. Ser. **94**, no. 2 (2016), 377--390.
- * 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.
84. (jointly with A. Ilyin), *Lieb-Thirring inequalities on the torus*. (English. Russian original) Sb. Math. **207**, no. 10 (2016), 1410--1434; translation from Mat. Sb. **207**, No. 10 (2016), 56--79.

- * 83. (jointly with A.Iljin, M.Loss and S.Zelik), *One-dimensional interpolation inequalities, Carlson—Landau inequalities and magnetic Schrödinger operators*, Int. Math. Res. Notices, 4 (2016), 1190--1222.
82. (jointly with H.Kovarik and T. Ekholm), *Hardy inequalities for p -Laplacians with Robin boundary conditions*, Nonlinear Analysis, **128** (2015), 365--379.
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75. (jointly with P. Exner and M. Usman), *On some sharp spectral inequalities for Schrödinger operators on semi-axis*, Commun. Math. Phys. **326**, (2014) no. 2, 531--541.
- * 74. (jointly with J. Dolbeault and M.J. Esteban), *Spectral estimates on the sphere*, Analysis & PDE, **7**, (2014) no. 2, 435--460.
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61. (jointly with O. Safronov), *Eigenvalue estimates for Schrödinger operators with complex potentials*, Comm. Math. Phys. **292** (2009), no. 1, 29-54.
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48. Editor of the Proceedings of the 4th Congress (4ECM) in Stockholm, 2004 European Mathematical Society (EMS), Zurich, 2005, 881 pp.
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42. (jointly with S.Naboko and O.Safronov), *On new relations between spectral properties of Jacobi matrices and their coefficients*, Comm. Math. Ph., **241** (2003), 91-110.
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38. (jointly with M.Hoffmann-Ostenhof and T.Hoffmann-Ostenhof) *A geometrical of Hardy's inequality*, J. Funct. Anal., **189**, (2002) no. 2, 539-548.
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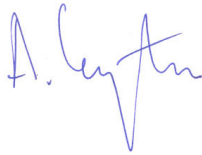
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