LIST OF PUBLICATIONS - SEROV VALERY:

The list of the papers published in 1990-2019:

1. On the Green's function in mathematical scattering theory, *Sov. Math. Dokl.*, Vol. 312(6), pp. 1324-1327, 1990.

2. A scattering problem for the Schrödinger operator with a singular potential in two dimensional case. Part I, *Diff. Uravn.*, Vol. 26(5), pp. 851-860, 1990.

3. A scattering problem for the Schrödinger operator with a singular potential in two dimensional case. Part II, *Diff. Uravn.*, Vol. 27(1), pp. 120-128, 1991.

4. Reconstruction of the potential in scattering theory in three dimensions, *Sov. Math. Dokl.*, Vol. 317(3), pp. 579-583, 1991.

5. On absolute convergence of the spectral expansions of operators with a singularity, *Diff. Uravn.*, Vol. 28(1), pp. 127-136, 1992.

6. Estimates of the resolvent for the Laplace operator in the whole space, *Math. Zametki,* Vol. 52(6), pp. 109-118, 1992.

7. The problem of reconstruction of the potential for the Schrödinger operator on the line in the sense of Born approximation (with D. Tkachenko), *Diff. Uravn.,* Vol. 29(1), pp. 108-118, 1993.

8. Some estimates of Green's function and applications in inverse scattering theory for the Schrödinger operator with singular potential, *Proc. Int. Conf. on Inverse Problems,* Lapland, Finland, June 13-21, 1992, Lecture Notes in Physics, pp. 203-207, 1993.

9. Uniqueness theorem for the Schrödinger operator with non-integrable potential on the segment (with L. Zhornitskaya), *Diff. Uravn.*, Vol. 29(12), pp. 2125-2134, 1993.

10. Uniqueness theorem for the Schrödinger operator with singular potential on the segment (with L. Zhornitskaya), *Russian Math. Dokl.*, Mathematics, Vol. 334(4), pp. 424-426, 1994.

11. Reconstruction of singularities of the potential for the Schrödinger operator in two dimensions (with L. Päivärinta and E. Somersalo), *Adv. Appl. Math.*, Vol. 15, pp. 97-113, 1994.

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15. Convergence of Riesz means for spectral expansions corresponding to a Schrödinger operator with singular potential (with N.S. Buzurnyuk), *Diff. Uravn.*, Vol.32(1), pp. 85-93, 1996.

16. Reconstruction of the variable coefficients in the multidimensional wave equation (with A.G. Razborov), *Vest. Mosk. Gos. Univ., Ser. 15*, no 4, pp. 11-19, 1996.

17. Existence of eigenwaves and solitary waves in the lossy linear and lossless nonlinear layered waveguides (with Yu.V. Shestopalov and H.W. Schürmann), *Russian Math. Dokl.*, Mathematics, Vol. 53(1), pp. 98-100, 1996.

18. On the theory of the TE-polarized waves in a linear three-layer structure (with Yu. V. Shestopalov and H.W. Schürmann), *Electromagnetic Waves*, no 5, pp. 56-63, 1996.

19. Some inverse problems for the Schrödinger operator on the line, in Proc. 15th IMACS World Congress, Sydow, A., Ed., Berlin, Vol. 3, pp. 365-367, 1997.

20. Recovery of singularities of a multidimensional scattering potential (with L. Päivärinta), *SIAM J. Math.Anal.*, Vol. 29(3), pp. 503-517, 1998.

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28. Recovering singularities from backscattering in two dimensions (with P. Ola and L. Päivärinta), *Comm.PDE* , Vol. 26(3-4), pp. 697-715, 2001.

29. New mapping properties for the resolvent of the Laplacian and recovery of singularities of a multidimensional scattering potential (with L. Päivärinta), *Inverse Problems*, Vol. 17(5), pp. 1321-1326, 2001.

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