

LIST OF PUBLICATIONS AND PREPRINTS YURII BELOV

Preprints

(P1) Y. Belov, A. Kulikov, Y. Lyubarskii, Gabor frame operator for Cauchy kernel, <https://arxiv.org/abs/2212.08915> ;

(P2) Y. Belov, M. Mironov, Exponential Riesz bases in L^2 on two intervals, <https://arxiv.org/abs/2212.02313>; accepted for publications in Int. Math. Res. Not. IMRN;

Publications

- (1) A. Baranov, Y. Belov, A. Kuznetsov, Systems biorthogonal to exponential systems on a finite union of intervals, J. Fourier Anal. Appl. 29, 23 (2023);
- (2) Y. Belov, A. Kulikov, Y. Lyubarskii, Gabor frames for rational functions, Invent. Math. 231, 431–466 (2023);
- (3) Y. Belov, A. Borichev, The Newman-Shapiro problem, J. Eur. Math. Soc. (JEMS), 25 (2023), no. 4, pp. 1227–1251;
- (4) Y. Belov, A. Borichev, On the chain structure in the de Branges spaces, J. Funct. Anal. 284(2), 109757, (2023);
- (5) A. Baranov, Y. Belov, A. Kulikov, Spectral synthesis for exponentials and logarithmic length, Isr. J. Math, 250, pp. 403–427, (2022);
- (6) Y. Belov, A remark to the Linnell theorem, (Russian) Zap. Nauchn. Sem. St.- Peterburg. Otdel. Mat. Inst. Steklov. (POMI) 512, pp. 35–39, (2022);
- (7) A. Baranov, Y. Belov, K. Gröchenig, Complete interpolating sequences for the Gaussian shift-invariant space, Appl. Comput. Harmon. Anal. 61, (2022), pp. 191–201;
- (8) P. Barkhayev, Y. Belov, Y. Lyubarskii, Summation method in optimal control problem with delay, Algebra i Analiz, 34, no. 3 (2022), pp. 115–130;
- (9) A. Aleman, A. Baranov, Y. Belov, H. Hedenmalm, Backward shift and nearly invariant subspaces of Fock-type spaces, Int. Math. Res. Not. IMRN, 2022, no. 10, 7390–7419;
- (10) Y. Belov, A. Kulikov, Y. Lyubarskii, Irregular Gabor frames of Cauchy kernels, Appl. Comput. Harmon. Anal. 57 (2022), pp. 101–104;
- (11) (review) Y. Belov, Geometric properties of reproducing kernels in Hilbert spaces of entire functions, Extended abstracts fall 2019-spaces of analytic functions: approximation, interpolation, sampling, pp. 25–30, Trends Math. Res. Perspect. CRM Barc., 12., Birkhäuser/Springer, Cham, 2021;
- (12) Y. Belov, A. Borichev, A. Kuznetsov, Upper and lower densities of Gabor Gaussian systems, 2020, Appl. Comp. Harmon. Anal., 49, n. 2., pp. 438–450;
- (13) Y. Belov, A. Borichev, K. Fedorovskiy, Nevanlinna domains with large boundaries, 2019, J. Funct. Anal. 277(8), pp. 2617–2643;

- (14) E. Abakumov, A. Baranov, Y. Belov, Krein-type theorems and ordered structure for Cauchy-de Branges spaces, 2019, *J. Funct. Anal.*, 277(1), pp. 200–226;
- (15) A. Baranov, Y. Belov, Synthesizable differentiation-invariant subspaces, (2019), *Geom. Funct. Anal.*, 29(1), pp. 44–71;
- (16) E. Abakumov, A. Baranov, Y. Belov, (2019), Localization of Zeros in Cauchy–de Branges Spaces, *Trends in Math., Analysis of operators on function spaces*, pp. 5–27;
- (17) Y. Belov, Sufficient conditions for synthesability of exponential systems, *Herald of the Bauman Moscow State Technical University, Series Natural Sciences* (2), pp. 4–11, (2018);
- (18) A. Baranov, Y. Belov, A. Borichev, The Young type theorem in weighted Fock spaces, *Bull. Lond. Math. Soc.* 50 (2018), no. 2, pp. 357–363;
- (19) (review) A. Baranov, Y. Belov, Spectral synthesis in Hilbert spaces of entire functions, *European Congress of Mathematics*, pp. 203–218, Eur. Math. Soc., Zürich, 2018;
- (20) A. Baranov, Y. Belov, A. Borichev, Summability properties of Gabor expansions, *J. Funct. Anal.* 274 (2018), no. 9, pp. 2532–2552;
- (21) Y. Belov, K. Fedorovskii, Model spaces containing univalent functions, (Russian), *Uspekhi Mat. Nauk* 73 (2018), no. 1(439), 181–182; translation in *Russian Math. Surveys* 73 (2018), no. 1, pp. 172–174;
- (22) A. Baranov, Y. Belov, A. Ulanovskii, Gap problem for separated sequences and Beurling-Malliavin theorem, *J. Fourier Anal. Appl.* 23 (2017), no. 4, pp. 877–885;
- (23) (review) A. Baranov, Y. Belov, Spectral synthesis for operators and systems, *Eur. Math. Soc. Newslet.* (2017), N103, pp. 11–18;
- (24) A. Baranov, Y. Belov, A. Poltoratski, De Branges functions of Schroedinger equations, *Collect. Math.*, (2017) n. 68, pp. 251–263;
- (25) A. Baranov, Y. Belov, A. Borichev, Fock type spaces with Riesz bases of reproducing kernels and de Branges spaces, (2017), *Studia Math.*, 236, n. 2, pp. 127–142;
- (26) Y. Belov, Y. Lyubarskii, On summation of non-harmonic Fourier series, *Const. Approx.*, (2016), Vol. 43:2, pp. 291–309;
- (27) Y. Belov, Bessel Sequences with Finite Upper Density in the de Branges Spaces, (Russian) *Algebra i Analiz* 27 (2015), no. 4, pp. 15–27; translation in *St. Petersburg Math. J.* 27 (2016), no. 4, 599–607;
- (28) Y. Belov, Uniqueness of Gabor series, *Appl. Comp. Harmon. Anal.*, 39 (2015), pp. 545–551;
- (29) Y. Belov, V. Havin, The Beurling-Malliavin Multiplier Theorem and its analogs for the de Branges spaces, Springer series: *Operator theory*, ed. Alpay. 2015. Vol. 1. pp. 581–609;
- (30) A. Baranov, Y. Belov, A. Borichev, Spectral synthesis in de Branges spaces, *Geom. Funct. Anal.*, (2015), Vol. 25, Iss. 2: pp. 417–452;
- (31) E. Abakumov, A. Baranov, Y. Belov, Localization of zeros for Cauchy transforms, *Int. Math. Res. Not. IMRN*, (2015), Vol. 2015, pp. 6699–6733;

- (32) A. Aleman, A. Baranov, Y. Belov, Subspaces of C^∞ invariant under the differentiation, *J. Funct. Anal.*, 268 (2015), pp. 2421–2439;
- (33) Y. Belov, Complementability of exponential systems, *C. R. Math. Acad. Sci. Paris*, 353 (2015), pp. 215–218;
- (34) A. Baranov, Y. Belov, A. Borichev, D. Yakubovich, Recent developments in spectral synthesis for exponential systems and for non-self-adjoint operators, *Recent Trends in Analysis Proceedings of the conference in honor of Nikolai Nikolski*, Theta Foundation, Bucharest, (2013), pp. 17–34;
- (35) A. Baranov, Y. Belov, A. Borichev, Hereditary completeness for systems of exponentials and reproducing kernels, *Adv. Math.*, 235 (2013), pp. 525–554;
- (36) A. Baranov, Y. Belov, A. Borichev, A restricted shift completeness problem, *J. Funct. Anal.*, 263 (2012), pp. 1887–1893;
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- (38) Y. Belov, T. Mengestie, K. Seip, Discrete Hilbert transforms on sparse sequences, *Proc. Lond. Math. Soc.* (3), (2011), Vol. 103, 73–105;
- (39) Y. Belov, T. Mengestie, K. Seip, Unitary discrete Hilbert transforms, *J. Anal. Math.*, (2010), Vol. 112, p. 383–395;
- (40) Y. Belov, Necessary conditions for the admissibility of majorants for some model subspace, (Russian) *Algebra i Analiz* 20 (2008), no. 4, 1–26; translation in *St. Petersburg Math. J.* 20 (2009), no. 4, 507–525;
- (41) Y. Belov, Model functions with an almost prescribed modulus, (Russian) *Algebra i Analiz* 20 (2008), no. 2, 3–18; translation in *St. Petersburg Math. J.* 20 (2009), no. 2, 163–174;
- (42) Y. Belov, Criteria for the admissibility of majorants for model subspaces with a rapidly increasing argument of the generating inner function, (Russian) *Zap. Nauchn. Sem. St.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* 345 (2007), Issled. po Linein. Oper. i Teor. Funkts. 34, 55–84, 141; translation in *J. Math. Sci. (N. Y.)* 148 (2008), no. 6, 813–829;
- (43) Y. Belov, V.P. Khavin, On a theorem of I. I. Privalov on the Hilbert transform of Lipschitz functions, (Russian) *Zh. Mat. Fiz. Anal. Geom.* 11 (2004), no. 4, 380–407.