

Sparse trigonometric approximation of classes of functions with mixed smoothness

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In the talk we are going to present results regarding to exact order bounds of the best m -term approximation of the classes of functions with mixed smoothness. These results were published in [1, 2, 3, 4, 5, 6].

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- [2] A. S. Romanyuk, *Approximation characteristics of classes of periodic functions of several variables*, Inst. Math. NASU, Kyiv, 2012.
- [3] V. N. Temlyakov, *Constr. Approx.*, **45**, (2017), 467–495.
- [4] D. Ding, V. N. Temlyakov, T. Ullrich, *Hyperbolic Cross Approximation*, arXiv:1601.03978v3 [math.NA] 21 Apr 2017
- [5] S. A. Stasyuk, *Ukr. Math. J.*, **68**, (2016), no. 7, 1121–1145.
- [6] S. A. Stasyuk, *Trudy Inst. Mat. i Mekh. UrO RAN*, **23**, (2017), no. 3, p. 244–252.