Sampling, interpolation, translates

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Abstract

I am going to discuss the following topics:

- Universal sampling of signals with bounded disconnected spectrum;
- Approximation of discrete functions and size of the spectrum;
- High-dimensional interpolation/sampling problems.

The presentation is based on joint work with A.Ulanovskii.

I will also speak about Wiener's conjecture on cyclic vectors for translations in $L^p(\mathbf{R})$. Our recent result, joint with N.Lev, gives a counterexample to this conjecture.

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