

Title: An introduction to applied harmonic analysis and frames

Abstract: The purpose of the talks is to give an introduction to frame theory in Hilbert spaces and its applications. Frames form a generalization of orthonormal bases, and lead to convenient series expansions of the elements in the underlying Hilbert space. We will discuss as well general frames in Hilbert spaces as their concrete manifestations in $L^2(\mathbb{R})$. The talks will be functional analytic of nature.