

#### ABSTRACT

I will discuss many different extensions of the classical Wiener's Tauberian Lemma. The talk is designed to show the audience how a remarkable statement about the Fourier coefficients of the inverse function has grown into a result about the preservation of memory decay by inverse operators, regardless of whatever reasonable definition of memory is used. In the final part of the talk I will discuss natural applications of Wiener's Lemma to Frame theory dealing with various properties of dual generators of Gabor frames.