Ghanshyam Bhatt* (gbhatt@tnstate.edu), Nashville, TN 37221. Bases, Frames and associated operators in a Hilbert Space.

The expansion formula for a signal in a Hilbert space requires a set of redundant or non-redundant vectors. Bases (non-redundant set) have been used for a long time. Over the past few years, frames (redundant or an over-complete spanning set) have been studied because of their applications. Bases, frames and other sequences in a Hilbert space can be associated with operators. The desired frames can be constructed by using the properties of the associated linear operators. In this talk, we provide frames as a sum of two frames for a given Hilbert space by using the operators associated with them. (Received September 15, 2014)