1106-42-1820 Ghanshyam Bhatt* (gbhatt@tnstate.edu), Nashville, TN 37209. Bases, frames and associated operators from graphs and vertices.

Bases are sometimes inadequate for some desired applications like signal processing. Frames are linearly dependent spanning sets, so they are generalization of basis. The graphs with n vertices can provide some nice frames in \mathbb{R}^n . In this talk we will discuss some of the properties of frames and their connections with the vertices of a graph. (Received September 15, 2014)