Vignon S Oussa* (voussa@bridgew.edu), Bridgewater, MA. Sampling and Interpolation on some Nilpotent Lie Groups.

Using well-known results of frame theory and time-frequency analysis, we establish the existence of sampling subspaces of square integrable functions over some non-commutative nilpotent Lie groups. We will also present recent surprising results on the existence of sampling spaces over non commutative nilpotent Lie groups which enjoy the interpolation property. (Received August 14, 2014)