Meeting: 999, Nashville, Tennessee, SS 2A, Special Session on Wavelets, Frames, and Sampling

999-42-49 **Deguang Han***, Department of Mathematics, University of Central Florida, Orlando, FL 32816.
Frames and Sampling Expansions in Reproducing Kernel Hilbert and Banach Spaces.

Given a countable subset Λ of a set Ω. We investigate the construction of all the reproducing kernel Hilbert (resp. Banach) spaces on Ω that have Λ as a sampling (resp. p-sampling) set. Unlike the general p-frames, we prove that every p-sampling set for a reproducing kernel Banach space yields a reconstruction formula. This is a joint work with Z. Nashed and Q. Sun. (Received July 26, 2004)