

Meeting: 1004, Bowling Green, Kentucky, SS 1A, Special Session on Numerical Analysis, Approximation, and Computational Complexity: Interdisciplinary Aspects

1004-41-20 **Scott N. Kersey*** (skersey@GeorgiaSouthern.edu), Department of Mathematical Sciences, Georgia Southern University, 0203 Georgia Ave., Statesboro, GA 30460-8093. *Applications of Approximation in Hilbert Spaces*. Preliminary report.

Following work by Atteia, Laurent, Bezhaev and Vasilenko, we formulate the problems of constrained spline interpolation and smoothing in the abstract Hilbert space setting. In doing, variational spline problems are unified, and perhaps some computational techniques are revealed. (Received December 16, 2004)