1011-60-384 **Bozenna J. Pasik-Duncan*** (bozenna@math.ku.edu), Department of Mathematics, Snow Hall, University of Kansas, Lawrence, KS 66045. *Stochastic Differential Equations in a Hilbert Space Induced from a Fractional Brownian Motion.* Preliminary report.

Some families of stochastic differential equations in a Hilbert space with a cylindrical fractional Brownian motion are considered. These equations include linear, bilinear, and semilinear. Solutions are obtained and sample properties are noted. These equations are shown by examples to describe some stochastic partial differential equations. (Received August 30, 2005)