1053-60-22 **Tyrone Edward Duncan*** (duncan@math.ku.edu), Mathematics Department, Snow Hall, 1460 Jayhawk Blvd., Lawrence, KS 66045. *Solutions of Stochastic Differential Equations with a Fractional Brownian Motion.* Preliminary report.

Two approaches to solving stochastic differential equations are pathwise and probabilistic. For both of these approaches strong, mild, and weak solutions are considered. The stochastic equations are formulated in both finite dimensional and infinite dimensional Hilbert spaces. The equations are bilinear and semilinear. Some specific equations are given as examples of the results. (Received June 12, 2009)