1077-60-1425 **Hong Yin*** (hyin@brockport.edu), Department of Mathematics, State University of New York, Brockport, NY 14420. *Solvability of Forward-Backward Stochastic Partial Differential Equations.*

In this talk we study the solvability of a class of fully-coupled forward-backward stochastic partial differential equations (FBSPDEs). These FBSPDEs cannot be put into the framework of stochastic evolution equations in general, and the usual decoupling methods for the Markovian forward-backward SDEs are difficult to apply. We prove the well-posedness of the FBSPDEs, under various conditions on the coefficients, by using either the method of contraction mapping or the method of continuation. These conditions, especially in the higher dimensional case, are novel in the literature. Moreover, we show that the usual monotonicity assumption can be removed, in the case of method of continuation, by a change of the diffusion term. (Received September 19, 2011)