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**Yimin Xiao\*** ([xiao@stt.msu.edu](mailto:xiao@stt.msu.edu)), Department of Statistics and Probability, A-413 Wells Hall, Michigan State University, East Lansing, MI 48824. *Strong Local Nondeterminism of Anisotropic Gaussian Random Fields with Applications to SPDEs*. Preliminary report.

In this talk we will present results on strong local nondeterminism of anisotropic Gaussian random fields and on their sample path properties. These results can be applied to solutions of certain stochastic partial differential equations including the stochastic heat equation. (Received August 10, 2006)