1044-60-13

Xia Chen\* (xchen@math.utk.edu), Department of Mathematics, University of Tennessee, Knoxville, TN 37996. Large deviations for local and intersection local times of fractional Brownian motions. Preliminary report.

It is well known that the local and intersection local times of Gaussian process can be constructed by a method known as local non-determinism. In this talk, I will show how this method can be used to establish the large deviations for the local and intersection local times of fractional Brownian motions. In addition, I will post some related conjectures and remaining problems. Part of of the talk is based on some on-going projects with Khoshnevisan, Rosinski, Wu, Xiao and Shao. (Received June 15, 2008)