

1044-60-23

Dongsheng Wu (dongsheng.wu@uah.edu), Department of Mathematical Sciences, University of Alabama in Huntsville, Huntsville, AL 35899, and **Yimin Xiao*** (xiao@stt.msu.edu), Department of Statistics and Probability, A-413 Wells Hall, Michigan State University, East Lansing, MI 48824. *Self-intersections of Gaussian random fields*. Preliminary report.

We present some recent results on self-intersection local times and the Hausdorff dimensions of the sets of multiple times and multiple points for a wide class of Gaussian random fields. (Received June 29, 2008)