1107-60-115
Ciprian Tudor, Laboratoire Paul Painlevé, Université de Lille 1, F-59655 Villeneuve d'Ascq,
France, and Yimin Xiao* (xiao@stt.msu.edu), Department of Statistics and Probability, 619
Red Cedar Road, Michigan State University, East Lansing, MI 48824. Sample paths of the solution to the fractional-colored stochastic heat equation. Preliminary report.

Let $\{u(t, x), t \in [0, T], x \in \mathbb{R}^d\}$ be the solution to the linear stochastic heat equation driven by a fractional noise in time with correlated spatial structure. We study various path properties of the process u both with respect to the time and to the space variable. In particular, we derive its sharp modulus of continuity and a Chung-type law of iterated logarithm. (Received January 08, 2015)