Fabrice Baudoin and Cheng Ouyang* (couyang@math.uic.edu), Dept of Math, Statistics and Computer Science, University of Illinois at Chicago, 851 S. Morgan Street, Chicago, IL 60607. On small time asymptotics for rough differential equations driven by fractional Brownian motions.

We survey existing results concerning the study in small times of the density of the solution to a rough differential equation driven by fractional Brownian motions. We then discuss some possible applications to mathematical finance. (Received August 10, 2015)