

1046-44-1497

Anna Amirdjanova* (anutka@umich.edu), 439 West Hall, 1085 S. University Avenue, Ann Arbor, MI 48109. *Stochastic Feynman integral: Perspectives from fractional stochastic calculus*. Preliminary report.

This work is devoted to the analysis of properties of stochastic Feynman integrals, where the latter are defined using abstract Wiener spaces associated to fractional Brownian motions of various Hurst indices. These results utilize a number of tools from fractional stochastic integration and the theory of Gaussian processes, which will also be discussed in some detail. (Received September 15, 2008)