

## <Statistical inference for the Hermite Ornstein-Uhlenbeck process>

<Obayda Assaad1>; <Ciprian Tudor 1>

<sup>1</sup> University of Lille, France

## Abstract:

We will briefly present the basic properties of the Hermite process and of the associated Ornstein-Uhlenbeck process. By using the analysis on Wiener chaos, we study the behavior of the quadratic variations of the Hermite Ornstein-Uhlenbeck process, which is the solution to the Langevin equation driven by a Hermite process. We apply our results to the identification of the Hurst parameter of the Hermite Ornstein-Uhlenbeck process.

NOTE: THE MAXIMUM NUMBER OF PAGES FOR THE PAPER IS SIX PAGES