

# Seminário de sistemas dinâmicos e estocásticos

Departamento de Matemática - IMECC - UNICAMP

## Behavior of the Hermite sheet with respect to the Hurst index.

Hector Araya

Universidad de Valparaíso

### Resumo:

We consider a  $d$ -parameter Hermite process with Hurst index  $H = (H_1, \dots, H_d) \in (\frac{1}{2}, 1)^d$  and we study its limit behavior in distribution when the Hurst parameters  $H_i$ ,  $i = 1, \dots, d$  (or a part of them) converges to  $\frac{1}{2}$  and / or 1. The limit obtained is Gaussian (when at least one parameter tends to  $\frac{1}{2}$ ) and non-Gaussian (when at least one-parameter tends to 1 and none converges to  $\frac{1}{2}$ ).

### **References**

[1] H.Araya, C.A.Tudor (2018):Behavior of the Hermite sheet with respect to the Hurst index. Stochastic Processes and their Applications. <https://doi.org/10.1016/j.spa.2018.07.017>

**Data:** Segunda-feira 11 de Fevereiro de 2019, 11:00hs.

**Local:** Sala 321 do IMECC.

Consulte a programação em [[www.ime.unicamp.br/ssde](http://www.ime.unicamp.br/ssde)]