Rough path and stochastic Stratonovich integrals driven by covariance singular Gaussian processes

Alberto Ohashi
Departamento de Matemática-UnB

Resumo

In this talk, we will show a connection between rough path integrals and symmetric-Stratonovich integrals for a large class of Gaussian processes with singular covariance structure. This encompasses many important examples such as fractional Brownian motion with $H > 1/3$, bifractional Brownian motion with $HK > 1/3$ and other types of Gaussian processes not necessarily with stationary increments. One important consequence of our result is to express the difference between the rough and Skorohod integral in terms of a trace term specified in terms of Malliavin derivatives.