

Workshop in Stochastic Analysis and Applications

IMECC - UNICAMP

May 2-4th, 2022

ROUGH PATHS AND STRATONOVICH INTEGRALS DRIVEN BY SINGULAR COVARIANCE GAUSSIAN PROCESSES

Alberto Ohashi

UNB - Brazil

Abstract

In this talk, we establish the relation between a stochastic version of the rough path integral with the symmetric-Stratonovich integral driven by a class of Gaussian processes with singular covariance structure. Under mild regularity conditions in the sense of Malliavin calculus, we establish explicit rates of convergence of the Stratonovich approximation scheme to a class of rough path integrals.