

Chilean Probability Seminar

Speaker: Julio Backhoff-Veraguas (University of Vienna, Austria)

Title: The Wasserstein-Martingale projection of a Brownian motion given initial and terminal marginals.

Abstract: In one of its dynamic formulations, the optimal transport problem asks to determine the stochastic process that interpolates between given initial and terminal marginals and is as close as possible to the constant-speed particle. Typically, the answer to this question is a stochastic process with constant-speed trajectories. We explore the analogue problem in the setting of martingales, and ask: what is the martingale that interpolates between given initial and terminal marginals and is as close as possible to the constant volatility particle? The answer this time is a process called 'stretched Brownian motion'. After introducing this process and discussing some of its properties, I will present current work in progress (with Mathias Beiglböck, Walter Schachermayer and Bertram Tschiderer) concerning the fine structure of stretched Brownian motions.

El enlace para conectarse al seminario es:

Unirse a la reunión Zoom

<https://reuna.zoom.us/j/84521834914?pwd=OTZ6Y0NWm3pYTGtTbEt3c0luTG96UT09>

ID de reunión: 845 2183 4914

Código de acceso: 997973

Wednesday, November 9, 2022, 16:15 hrs (Chilean time).

