

Chilean Probability Seminar

Orador: Armand Bernou (Universita Roma 1, Italia).

Título: Beyond the mean-field limit : uniform in time estimates for the cumulants of the McKean-Vlasov and Vlasov Fokker-Planck systems.

Resumen We consider particles in the torus, subject to binary, smooth interactions and Brownian perturbation, in the mean-field setting. Recently, Delarue and Tse (2021) obtained, using the master equation, a new proof of uniform in time propagation of chaos for this model. We will present how the combination of those techniques, and of the Glauber calculus introduced by Duerinckx (2021) to treat deterministic particle systems, allows one to control, uniformly in time, the cumulants of this system. We recover the expected order for the N-particle correlation functions, in some weak norm, which allows us to correct the mean-field limit and describe the fluctuations around it.

Joint work with Mitia Duerinckx (ULB-FNRS)

Lugar: Sala Multimedia CMM, Torre Norte 6to Piso. Beauchef 851.
April 19th (wednesday), at 16:15.

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

