

Seminario de Probabilidades de Chile.

Orador: Hagop Tossounian (CMM)

Título: Entropic and Fisher-information chaos for a family of rescaled states.

Resumen: For a fixed probability measure $f(x)$, and each $N \geq 2$ we introduce an exchangeable random variable obtained from rescaling Y ($\text{Law}(Y) = f^{\otimes N}$) to the sphere $\sum x_j^2 = N$. It is known [2] that all the k -marginals of these processes converge weakly to $f^{\otimes k}$, (a property known as chaoticity and used by Mark Kac [1]). The aim of the talk is to show

that the chaos property of this sequence of rescaled r.v. can be strengthened to entropic chaos and to Fisher-information chaos, under mild assumptions on f . This work is joint with Roberto Cortez and in preparation.

[1] M. Kac. Foundations of kinetic theory. In Proceedings of the Third Berkeley Symposium on Mathematical Statistics and Probability, 1954–1955, vol. III, pages 171–197, Berkeley and Los Angeles, 1956. University of California Press

[2] Cortez, R., Tossounian, H. On a Thermostated Kac Model with Rescaling. Ann. Henri Poincaré 22, 1629–1668 (2021).

El enlace para conectarse al seminario es:

Unirse a la reunión Zoom

<https://reuna.zoom.us/j/84521834914?pwd=OTZ6Y0NWM3pYTGtTbEt3c0luTG96UT09>

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MIÉRCOLES 20 DE OCTUBRE DEL 2021 A LAS 16:15 HRS.