

Seminario Probabilidades CMM

Speaker: Roberto Imbuzeiro Oliveira (IMPA)

Title: A mean-field theory for certain deep neural networks

Abstract: A natural approach to understand overparameterized deep neural networks is to ask if there is some kind of natural limiting behavior when the number of neurons diverges. We present a rigorous limit result of this kind for networks with complete connections and "random-feature-style" first and last layers. Specifically, we show that network weights are approximated by certain "ideal particles" whose distribution and dependencies are described by McKean-Vlasov mean-field model. We will present the intuition behind our approach; sketch some of the key technical challenges along the way; and connect our results to some of the recent literature on the topic.

Link

Zoom: <https://uchile.zoom.us/j/86711905177?pwd=ZmtOVEs3aUxGNHVtZXhESW82ZGZZUT09>

Meeting ID: 867 1190 5177

Passcode: 603868

Para mayor información:

<https://eventos.cmm.uchile.cl/probseminar/>