
Free Probability and Neural Networks

Issa Dabo^{*1}, Jérémie Bigot¹, and Camille Male¹

¹Université de Bordeaux – Université de Bordeaux (Bordeaux, France) – France

Résumé

While classical Probability relies on Measure theory, Free Probability studies randomness from an algebraic point of view.

This theory based on non-commutative algebra is used in various domains such as random matrix theory, combinatorics, quantum information theory.

After a brief introduction to Free probability, we will see how the theory is used to study neural networks

^{*}Intervenant