Speaker: Antoine BODIN

Title: **Random matrix methods for high-dimensional machine learning models**

Abstract: Random matrix theory is an essential tool in the analysis of high-dimensional statistical models. In this talk, we will investigate a specific class of random matrices which can be analyzed through the linear pencil method. This method enables the expression of fixed-point equations in the form of algebraic equations, offering insights into the behaviour and properties of these models. The talk aims to shed light on the practical use of this method and illustrates its application in simple machine learning systems.