

# Mini-workshop CNRS - SMU - ESSEC: Statistical Methods in Machine Learning and AI

org.: Jeremy HENG & Pierre ALQUIER (ESSEC Business School)

June 13, 2025 (morning)

## Program

- 08:55–09:00 Welcome.
- 09:00–09:30 **Talk: Caroline CHAUX (CNRS):** *Unrolled algorithms for inverse problems in signal and image processing.*
- 09:30–10:00 **Talk: Mikołaj KASPRZAK (ESSEC):** *Asymptotics of cut posteriors and robust modular inference.*
- 10:00–10:30 Coffee break.
- 10:30–11:00 **Talk: Antoine LEDENT (SMU):** *Spectral Decay and Generalization Bounds in Linear Classifiers and Neural Networks.*
- 11:00–11:30 **Talk: Cédric FEVOTTE (CNRS):** *Majorization-minimization Algorithms for Non-negative Matrix Factorization.*
- 11:30–12:00 **Talk: El Mahdi KHRIBCH (ESSEC):** *Convergence of Statistical Estimators via Mutual Information Bounds.*

## Practical information

To ensure seat + coffee for everyone, please send a message before June 3 to [pierre.alquier@essec.edu](mailto:pierre.alquier@essec.edu) if you plan to attend.

The workshop will take place in **Room 1C4** at ESSEC Business School, 5 Nepal Park, Singapore 139408.



The nearest MRT station is one-north MRT Station (CC23), on the Circle Line. When you reach the one-north MRT station, take Exit B and walk up Nepal Park to reach the campus. Buses: 74, 91, 92, 95, 191, 196, 198 or 200. Link: ESSEC on Google maps: <https://maps.app.goo.gl/Kfd5WjMk5aj2inPB8>