

# INSALATE DI MATEMATICA

presents

14/12/2022

ARMAND LEY

Université de Haute-Alsace

*A brief introduction to entropic optimal transport*



## Abstract:

In this talk, staying in the discrete setting, we will first introduce the Monge-Kantorovitch problem, which is the central problem in optimal transport. After this, we will say a few words about a functional called "entropy" (with a generalized version of it) and present its properties. This will then allow us to discuss an entropically penalized version of the Monge-Kantorovitch problem and provide some numerical illustrations of the results/interpretations presented hereafter. I will finally discuss the issues arising when we try to generalize the presented results in the non-discrete setting.

**Keywords:** Optimal transport · Entropy · Sinkhorn algorithm · Convergence in probability spaces

Dipartimento di Matematica e Applicazioni  
Università degli Studi Milano Bicocca

U5-3014  
4:00 pm (CET)



*"Obvious" is the most dangerous word in mathematics.  
(Eric Temple Bell)*