Séminaire conjoint
Département OSD et CIRRELT

Jacopo Di Iorio
Postdoctoral fellow, Penn State University, USA

CIRRELT

UNIVERSITÉ LAVAL | Faculté des sciences de l'administration
Département d'opérations
et systèmes de décision

Bi-clustering based techniques for functional data and economic complexity

Summary: Bi-clustering is a data mining task which allow simulataneous clustering of the rows and columns of a matrix. Firstly introduced for the analysis of gene array expression data, it became more and more prominent in other application fields. Even if not as widely recognized as clustering, the idea behind the identification of biclusters can be levareged to deal with complex problems and data. In this talk, we will focus on a new bi-clustering method to compute the economic and product complexity indices for countries, addressing the technical and interpretative novelties of this approach. On the other hand, inspired by the complex task of segmenting fMRI data, a biclustering and triclustering technique is presented and tested using simulated fMRI data.

Short biography: Jacopo Di Iorio is the Eberly postdoctoral fellow at the Department of Statistics of Penn State University since 2021. He got his Ph.D. in Mathematical Methods and Models from Politecnico di Milano and his research lies at the intersection of functional data analysis (FDA), unsupervised learning- principally clustering and biclustering - and statistical computing motivated by complex, challenging applications, as well as a passion for Statistics Education.

**Vendredi
17 mai 2024
9h00**

**Université Laval
Pavillon Palasis-Prince
Salle 2327**

**Ouvert à tous
Café et viennoiseries**

**Responsable :
Jacques Renaud**

UNIVERSITÉ LAVAL · McGill · Concordia UNIVERSITY · ÉTS · UQÀM · HEC MONTRÉAL · POLYTECHNIQUE MONTRÉAL · Université de Montréal · IVADO · Fonds de recherche Société et culture Québec · Fonds de recherche Nature et technologies Québec