

LCIS Seminar
Friday, 9 December 2022 at 14:15
Room: D011

14:15 – 15:00

Title: Interacting urns and applications

Rafik Aguech, Professor at University of Monastir, Tunisia and at King Saud University.

Abstract: In this talk we introduce a general two-color interacting urn model on a finite directed graph. Randomly evolving systems with components that interact with each other have been of great interest in research. In particular, in networks, biology, medicine, etc. We consider a system composed of N interacting two-color Friedman which interact together every time: the interaction model considered is such that the reinforcement of each urn depends on the fraction of balls of a particular color in each urns. At the end of this talk we give some applications of this model on opinion dynamics, networks, biology etc.

Short Bio: Rafik Aguech is currently Professor at University of Monastir, Tunisia and at King Saud University. He graduated from the university of Bizerte, Tunisia, and earned his PhD in 2000 from the university of Pierre et Marie Curie, under the supervision of Eric Moulionès and Pierre Priouret. From 2001 he held the position of assistant professor at the University of Monastir then he becomes Professor at the same university in 2011. From 2014 to now he is Professor at the University of King Saud. Rafik Aguech supervised 6 PhD thesis and several Master's dissertations and was invited professor several times in France. His interests are in Polya urns and processes, random graphs, random fragmentation, queuing theory, limit theorems.