

Information in networks

Objectifs et contenu

This course provides an introduction to the basic tools of network science - a relatively new area of study, which analyzes properties of real-world networks, notably, those used in transportation, infrastructure, and socio-economic interactions.

The main objective is to provide the audience with a better perspective of mechanism which allow us to explain complex real-world phenomena through the way in which people (and systems) communicate and interact with each other. We specifically focus on so-called diffusive network processes, such as spread of information, spread of influence, and propagation of failure. Specific questions which we will address include the following:

"Why do networks have the structure which we observe?",

"How to build resilient networks for infrastructure and logistics?", and

"How to maximize market reach when launching a new product?".

Intervenant(s)

Adrian Kosowski (INRIA, IRIF).

Public visé

Non précisé.

Prérequis

Anglais souhaité.

Durée et emploi du temps

1 jour (de préférence).

Infrastructure requise

Une simple salle.

