## SIMION STOILOW INSTITUTE OF MATHEMATICS OF THE ROMANIAN ACADEMY GDRI - Ecomath network

## **Monthly Conference**

## Spatial evolution of an epidemic and «social» networks Jean-Stéphane Dhersin (INSMI - CNRS, France)

Wednesday, November 3rd 2021, 13:00, Miron Nicolescu amphiteater

Zoom link: https://us02web.zoom.us/j/83091753786?pwd=eDIvNTg1dVB1aGRTOVNudERqTENsdz09

**Abstract:** One of the criticisms that can be levelled at the modelling of the epidemic is the lack of consideration of spatial structure. A reasonable approach is to plot the epidemic on a graph. We will see what happens on theoretical graphs. However, understanding the true structure of the underlying graph is often complicated. One method is to look at a random branching walk on the graph to find it out. We will look at the information we can get from it. This method, called 'Respondent-driven' study have been applied in Paris to discover the social network of people who inject drugs (PWIDs).