Mesocopic localization

Main takeaways

- The phenomenon of localization extends to meso-scopic structures like groups.
- Mesoscopic localization is the rule rather than the exception.
- ▶ Interventions at the group level are more efficient in presence of localization.

PHYSICAL REVIEW LETTERS 126, 098301 (2021)

Social Confinement and Mesoscopic Localization of Epidemics on Networks

Guillaume St-Onge[®], ^{1,2} Vincent Thibeault[®], ^{1,2} Antoine Allard[®], ^{1,2} Louis J. Dubé, ^{1,2} and Laurent Hébert-Dufresne[®], ^{1,3,*}

PHYSICAL REVIEW E 103, 032301 (2021)

Master equation analysis of mesoscopic localization in contagion dynamics on higher-order networks

Guillaume St-Onge , ^{1,2} Vincent Thibeault , ^{1,2} Antoine Allard , ^{1,2} Louis J. Dubé, ^{1,2} and Laurent Hébert-Dufresne , ^{1,3,4,*}



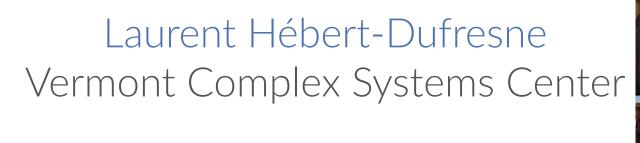
Guillaume St-Onge Network Science Institute







Louis J. Dubé Jniversité Laval





Outline

- 1. The model and its mathematical description
- 2. Some applications
 - (a) Mesocopic localization
 - (b) Heterogeneous transmission settings
 - (c) Context-sensitive behavior