

The Mansueto Institute Lunch Colloquium Series

Small Adaptation, Large Impact: Exploring Small Changes and their Effect on Urban Systems

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Urban systems, as all complex systems, react to adaptations in a non-linear fashion. The first part of the talk will show how modelling and simulation can support urban planning by analyzing the system-wide impact of proposed infrastructure projects. Further, it will show how the use of clustering methods and parameter space exploration can lead to proposals to reach future development goals. The second part will zoom out to a larger scale, and provide an example of how minor changes in population dynamics of integrated urban systems impact the population distribution at large and can explain a wide variety of observed statistical patterns.