LadHyX Seminar - Nov. 23, 10:45

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From data to statistical models of cities

The recent availability of new sources of data such as mobile phones, GPS, etc, allow to shed a new light on the structure and functioning of urban systems. In particular, human mobility can inform us about the spatial organization of cities and their infrastructure, and help us to construct simple models in agreement with observations. I will illustrate these different points by showing how we can extract mesoscale information from mobile phone data and present evidences for a polycentric organization of large cities. I will then discuss a simple model for explaining this organization and how it evolves when population grows.