Santa Fe Institute - Cities, Scaling & Sustainability



SFI's Cities, Scaling, and Sustainability research effort is creating an interdisciplinary approach and quantitative synthesis of organizational and dynamical aspects of human social organizations, with an emphasis on cities. Different disciplinary perspectives are being integrated in terms of the

search for similar dependences of urban indicators on population size – scaling analysis – and other variables that characterize the system as a whole.

A particularly important focus of this research area is to develop theoretical insights about cities that can inform quantitative analyses of their long-term sustainability in terms of the interplay between innovation, resource appropriation, and consumption and the make up of their social and economic activity. This focus area brings together urban planners, economists, sociologists, social psychologists, anthropologists, and complex system theorists with the aim of generating an integrated and quantitative understanding of cities. Outstanding areas of research include the identification of general scaling patterns in urban infrastructure and dynamics around the world, the quantification of resource distribution networks in cities and their interplay with the city's socioeconomic fabric, issues of temporal acceleration and spatial density, and the long-term dynamics of urban systems.

Read more: http://www.santafe.edu/research/cities-scaling-and-sustainability/