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	Autore	Aguiar Maira
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the population mobility: an agent-based model approach.

Sommario/riassunto	In an increasingly globally-connected world, the ability to predict, monitor, and contain pandemics is essential to ensure the health and well-being of all. This contributed volume investigates several mathematical techniques for the modeling and simulation of viral pandemics, with a special focus on COVID-19. Modeling a pandemic requires an interdisciplinary approach with other fields such as epidemiology, virology, immunology, and biology in general. Spatial dynamics and interactions are also important features to be considered, and a multiscale framework is needed at the societal level, the level of individuals, and the level of virus particles and the immune system. Chapters in this volume explore the latest research related to these items to demonstrate the utility of a variety of mathematical methods. Perspectives for the future are also offered.