

Special Issue

Recent Advances in Mathematical Modeling of COVID-19 and Other Infectious Diseases

Message from the Guest Editors

Mathematical modeling is a valuable tool in understanding the dynamics of infectious diseases (such as the coronavirus disease COVID-19). This involves using mathematical equations to represent the transmission and control of infectious diseases at the population level. The mathematical analysis of continuous models, the construction of their various time-discrete variants, and the solving of appropriate inverse problems are important tools for uncovering the behaviors over time of many crucial parameters that characterize the diseases' dynamics. These models are essential for assessing the effectiveness of vaccination strategies, determining the best vaccination ages and target groups, and predicting future growth patterns of infectious diseases. This Special Issue welcomes the submission of research and review articles that address the development of novel mathematical modeling and its applications.

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Message from the Editor-in-Chief

Axioms is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

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