Novel and Innovative Methods for Fractional-Order Epidemic Model

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Message from the Guest Editors

Dear Colleagues,

Fractional calculus, has seen a resurgence in interest due to its wide-ranging applications across diverse areas, particularly in modeling epidemic diseases. The use of fractional-order epidemic models offers a novel approach to understanding the complex dynamics of disease spread.

In this Special Issue, we look forward to your contributions in pushing the boundaries of our understanding of epidemic dynamics using fractional calculus. Topics of interest include, but are not limited to:

- development and analysis of fractional-order epidemic models
- utilization of fractional integral and differential operators in modeling disease spread
- the application of fractional optimal control theory
- theoretical, computational, and realistic nature of infectious disease models
- review of effect of new fractal differential and integral operators for modeling infectious diseases
- modeling diseases with fuzzy differential equations
- stochastic fractional-order epidemic models.

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Special Issue