New Insights into Nonlinear Coupled Differential Equations with Its Applications

Guest Editors:

Dr. Nallappan Gunasekaran

Dr. R. Vadivel

Dr. Zipeng Wang

Prof. Dr. Sandra Pinelas

Deadline for manuscript submissions:
closed (31 July 2023)

Message from the Guest Editors

Dear Colleagues,

The tools of nonlinear coupled differential equations have been proven to be quite useful in simulating a variety of real-world issues encountered in scientific and technical domains. These equations are crucial in modeling every physical, chemical, biological, and economic activity. The existence and uniqueness of solutions are the emphasis of pure mathematics, but the formal justification of methods for approximating solutions is the focus of applied mathematics.

Nonlinear coupled differential equations are used to address a wide range of real-world issues. Furthermore, they may be tackled using a variety of methodologies and strategies. Because of their use in the mathematical modeling of a variety of physical and engineering processes, these differential systems with a variety of boundary conditions have attracted a lot of attention.

This Special Issue offers a platform for researchers to share their research. We welcome innovative research articles to be submitted in order to generate interest in the development of mathematical approaches for nonlinear coupled differential equations and related topics.

Special Issue