

Special Issue on **Stability and Bifurcation Analysis of Discrete Dynamical Systems 2021**

CALL FOR PAPERS

Discrete dynamical systems are described by different equations and potentially have applications in many areas like probability theory, economics, biology, computer science, control engineering, genetics, signal processing, population dynamics, health sciences, ecology, physiology, physics, etc.

The study of such systems has a direct impact on human sciences such as ecosystem, health, population dynamics and decision making, etc. Therefore in recent years, this motivated a number of researchers to study the behavior of these systems. The behavior of such systems means studying equilibrium points, local and global dynamics about equilibrium points, the existence of prime period and periodic points, prime-period two solutions, forbidden set, boundedness, persistence, existence, uniqueness of positive equilibrium point, the existence of local and global bifurcation, chaos control, hybrid control and many more.

The aim of this Special Issue is to solicit original research articles and review articles in the field of discrete dynamical systems described by difference equations. This is an excellent opportunity for researchers to share their findings with the scientific community, especially those working in the fields related to the special issue. Submissions addressing any aspect of stability and bifurcations analysis of discrete dynamical systems are highly encouraged. This Special Issue also includes the study of bifurcations, and chaos of discrete-time models from economics, biology, ecology, physics, etc.

Potential topics include but are not limited to the following:

- ▶ Boundedness and persistence of positive solution
- ▶ Local and global dynamics about equilibrium point
- ▶ Lyapunov stability analysis
- ▶ Existence of prime period and periodic points
- ▶ Calculation of forbidden set
- ▶ Local and global bifurcation analysis of discrete-time models from economics, biology, population dynamics, ecology, physiology, and physics

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.hindawi.com/submit?specialIssue=251746>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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