

Special Issue

Advances in Linear Recurrence System

Message from the Guest Editors

This Special Issue, "Advances in Linear Recurrence System", welcomes submissions from a broad interdisciplinary area. Typical interdisciplinary uses of recurrence relations are to describe the kinetics of physical, chemical, and biological processes. In biology, some of the best-known difference equations originated from the attempt to model population dynamics.

Coupled difference equations are often used to model the interaction of two or more populations, such as the Nicholson–Bailey model. Integrodifference equations are a form of recurrence relation important to spatial ecology. In computer science, recurrence relations are also of fundamental importance in the analysis of algorithms, while in digital signal processing, recurrence relations can model feedback in a system, where outputs at one time point become inputs for a future time point. Furthermore, recurrence relations, especially linear recurrence relations, are used extensively in both theoretical and empirical economics. In the terms of MSC classification, recurrences appear in number theory, topological dynamics, and in numerical analysis.

Guest Editors

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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