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Peer Review

Review of: "Asymptotically Periodic and Bifurcation Points in Fractional Difference Maps"

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Fractional difference mappings are maps with power-law-like memory. These mappings are important in modeling biological and socio-economic systems, memristors, and image and signal encryption.

In the paper under review, the author investigates the fractional difference maps, which do not have periodic non-fixed points. The author analyzes asymptotically periodic points, bifurcation points, and draws some asymptotic bifurcation diagrams. The author derives the analytic expressions for the coefficients of the equations that define periodic points in fractional difference maps of the orders $0<\alpha<1$. The most difficult part of the manuscript is solving the corresponding systems of large numbers of algebraic equations and analyzing their solutions.

The paper is well-written, interesting, and important in the fields of discrete fractional calculus and discrete dynamical systems.

Declarations

Potential competing interests: No potential competing interests to declare.

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