

# Bijective Class of Replicator Equations

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**Abstract** The Rock-Paper-Scissors game serves as a crucial toy model in understanding evolutionary dynamics, leading to the formulation of a replicator equation. This paper introduces a comprehensive and enduring category of replicator equations derived from expanding functions. It is established that such equations are bijections of the 2D simplex. The current investigation allows further exploration of inverse dynamical behavior of the replicator equations.

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