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Strictly non-Volterra quadratic stochastic operator (QSO) on 3-dimensional simplex (Conference Paper)

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Abstract

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In this paper, we investigate the dynamics of the Lebesgue quadratic stochastic operator on the set of all Lebesgue measures of the set $X = [0,1]$. We consider the family of functions such that for any fixed x, y a probability measure $P(x, y)$ is absolutely continuous with respect to usual Lebesgue measure on X with simple Radon-Nikodym derivative. We construct the family of strictly non-Volterra quadratic stochastic and show that their dynamic behavior coincides with dynamic of strictly non-Volterra quadratic stochastic operator on 3-dimensional simplex. © 2018 Author(s).

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