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Strictly Non-Volterra Quadratic Stochastic Operator (QSO) on 3-Dimensional SimplexBy: [Ganikhodjaev, N](#) (Ganikhodjaev, Nasir)^[1]; [Jusoo, SHB](#) (Jusoo, Siti Hasanah Bt)^[1]PROCEEDING OF THE 25TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES (SKSM25):
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Abstract

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 $P(x, y, \cdot)$ 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.

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+ Int Islamic Univ Malaysia, Fac Sci, Dept Computat & Theoret Sci, Jalan Sultan Ahmad Shah, Kuantan 25200, Pahang, Malaysia.

Addresses:

+ [1] Int Islamic Univ Malaysia, Fac Sci, Dept Computat & Theoret Sci, Jalan Sultan Ahmad Shah, Kuantan 25200, Pahang, Malaysia

E-mail Addresses: gnasir@iiu.edu.my; hasanah.jusoo@gmail.com**Funding**

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