# Averaging of random groups associated with random nonlinear differential equation

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In this work, we study groups of transformations associated with nonlinear first-order partial differential equation

$$\frac{\partial u}{\partial t} = \gamma \frac{\partial u}{\partial x} + u^2. \tag{1}$$

Here $\gamma$ is random variable. Expected value of random group $U_\gamma(t)$, $t \in \mathbb{R}$, associated with differential equation (1), is described. Low of large numbers for composition independent random group $U_\gamma$ is obtained.

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