## 1067-34-702

Reza R Ahangar\* (reza.ahangar@tamuk.edu), MSC 172, math Department, 700 University BLVD, Teaxs A & M University-Kingsville, Kingsville, Texas 78363. Computational Approach to the Solution of Random Pertubed Logistic Model. Preliminary report.

Consider a classical stochastic differential equation dX(t)=X(t).(a-bX(t))+c.W(t)dW(1) (where X(t) is a solution and W(t) is a Brownian motion with a normal distribution of mean zero and standard deviation one. For constant real numbers a, b, and c, we define stochastic logistic differential equation(1). The solution to this logistic stochastic differential equation (1) can be introduced by Ito's integral calculus. Our goal is to estimate the solution using Riemann-Stieltjes integral where a function g(t)=W(t) does not have to be a differentiable function but it has to be a function of bounded variation. (Received September 13, 2010)