

PHYS 301

HOMEWORK #7

Due : Wed., 12 March 2014

For this programming assignment, you will look up the RandomReal function on Mathematica. Using this function, write a short Mathematica program that will generate random numbers between 0 and 1, and compute the average of those numbers. Do trials for nterms = 100, 1000, 10000, 100000 and 1, 000, 000. (Remember to create a data array to store previously computed values of your variable).

What value do you expect to get for the average? Next, compute the standard deviation for each of these trials. For this assignment, email me your Mathematica .nb file at dslavsk@luc.edu. You must send this email from your Loyola account.

This assignment will be based out of 40 points.