

Laboratory of Computational Physics (M.Sc.)

Department of Physics, NIT Srinagar

Faculty Incharge:
Student:

Dr. Harkirat Singh
Mr. Junid

C. No. :PSPHY-LB5/305
R. No. :

S. No.	Name of Experiment	Bench No.
1.	Write MATLAB script to simulate the decay of radioactive nucleus.	
2.	Write MATLAB script for the numerical solution of equation of motion for a simple pendulum using the Euler method.	
3.	Write a MATLAB script for the numerical solution of damped pendulum.	
4.	Write a MATLAB script to simulate the planetary motion of earth around the sun.	
5.	Write a MATLAB script to simulate the random walk.	
6.	Write a MATLAB script to solve time dependent Schrodinger equation in 1D for particle in a box problem.	
7.	Write a MATLAB script to simulate the Ising model of a ferromagnet.	
8.	Write a matlab script for harmonic oscillator potential and quantum mechanical wavefunction for $n=2$.	
9.	Write MATLAB script for the numerical solution of equation of motion for a simple pendulum using the Runge-Kutta method.	