

Department of Physics and Astronomical Sciences
Central University of Himachal Pradesh (CUHP) and
Indian Association of Physics Teachers–Regional Council (IAPT-RC3)
Jointly Organise an
Online Faculty Development Programme (FDP) from 1st to 7th August, 2021
on the topic

Quantum Physics Simulations Using Gnumeric Worksheets

Day-wise Program Schedule

Date	Time	Title	Resource Person
1-08-21	11:00 am	Inaugural Address: An Overview of Quantum Physics	<u>Prof. R.C. Verma</u> , Professor Emiretus
	3:00 pm	An Introduction to Simulation Methodology	Prof. O.S.K.S. Sastri, CUHP
	4:00 pm	Particle in 1D Box using Central Divided Difference (CDD)	Sapna Verma, RKMV, HPU Shimla
2-08-21	11:00 am	Evolution of Quantum Mechanics and its different formulations.	<u>Prof. P. K. Ahluwalia</u> , HPU
	3:00 pm	Finite Square Well: Analytical solutions using Bisection	Prof. O.S.K.S. Sastri, CUHP
	4:00 pm	Introduction to Numerov Matrix Method (NMM)	Dr. Sunil Bansal, Punjab University, Chandigarh
3-08-21	11:00 am	An introduction to weak measurement and entanglement.	<u>Prof. H. S. Mani</u> , Institute of Mathematical Sciences, Chennai
	3:00 pm	Introduction to Matrix Methods with Sine Basis (MMS)	Prof. O.S.K.S. Sastri, CUHP
	4:00 pm	Harmonic Oscillator using MMS	Dr. Pawan Kumar Sharma, GC, HPU, Solan
4-08-21	11:00 am	Re-arranging information - Isospectral Approach	<u>Prof. C. Nagaraja Kumar</u> , Punjab University
	3:00 pm	Coulomb potential using NMM and MMS	Dr. Vikram, Goswami Ganesh Dutta Sanatan Dharma College, Chandigarh
	4:00 pm	Morse potential using NMM and MMS	Prof. O.S.K.S. Sastri, CUHP
5-08-21	11:00 am	Particle in a Box: A Basic Paradigm in Quantum Mechanics	<u>Prof. V. Balakrishnan</u> , IIT Chennai
	3:00 pm	Modeling n and p Single Particle Energies using Woods-Saxon potential	Dr. K. Vijay Sai, Sri Sathya Sai Institute of Higher Learning
	4:00 pm	Woods-Saxon potential: Implementation using NMM	Prof. O.S.K.S. Sastri, CUHP
6-08-21	11:00 am	Classical Approach to Quantum Theory	<u>Prof. Muralidhar</u> (retd), National Defence Academy, Pune
		Project Work	
7-08-21	11:00 am	An Introduction to Quantum Impedance Model	<u>Dr. Peter Cameron</u> , USA

Registration link: <https://forms.gle/tPjU99AwdVm8Z8fa9>

Dr. Pawan Kumar Sharma
(Organising Secretary)
Executive Council Member(IAPT-RC3)

Prof. O.S.K.S.Sastri
(Convenor)
Vice-President(IAPT-RC3)