

*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 1<sup>st</sup> to 7<sup>th</sup> August, 2021**  
*on the topic*

**Quantum Physics Simulations Using Gnumeric Worksheets**

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**Day-wise Program Schedule**

Date	Time	Title	Resource Person
1-08-21	11:00 am	<b>An Introduction to Simulation Methodology</b>	Prof. O.S.K.S. Sastri, CUHP
	3:00 pm	<b>Particle in 1D Box using Central Divided Difference (CDD)</b>	Dr Sapna Verma, RKMV, HPU Shimla
2-08-21	3:00 pm	<b>Finite Square Well: Analytical solutions using Bisection</b>	Prof. O.S.K.S. Sastri, CUHP
	4:00 pm	<b>Introduction to Numerov Matrix Method (NMM)</b>	Dr. Sunil Bansal, Punjab University, Chandigarh
3-08-21	3:00 pm	<b>Introduction to Matrix Methods with Sine Basis (MMS)</b>	Prof. O.S.K.S. Sastri, CUHP
	4:00 pm	<b>Harmonic Oscillator using MMS</b>	Dr. Pawan Kumar Sharma, GC, HPU, Solan
4-08-21	3:00 pm	<b>Coulomb potential using NMM and MMS</b>	Dr . Vikram, Govt. College, Chandigarh
	4:00 pm	<b>Morse potential using NMM and MMS</b>	Prof. O.S.K.S. Sastri, CUHP
5-08-21	3:00 pm	<b>Woods-Saxon potential</b>	Dr. K. Vijay Sai, Sri Sathya Sai Institute of Higher Learning, AP
	4:00 pm	<b>Woods-Saxon potential: Implementation using NMM</b>	Prof. O.S.K.S. Sastri, CUHP
6-08-21		<b>Project Work</b>	
7-08-21		<b>Project Presentation</b>	

Morning : Special Lectures on Quantum Physics at 11:00 am by experts

All Resource persons are part of Physics Education Researcher Scholars Online Network (PERSON). The content shall be uploaded on the following website:

<https://fdpqmsim.saivyasa.in/>

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

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