

Science Academies' Refresher Course on Quantum Mechanics

5 – 18 May 2014

Sponsored by Indian Academy of Sciences, Bangalore,
Indian National Science Academy, New Delhi
The National Academy of Sciences, India, Allahabad

In collaboration with Bishop Moore College, Mavelikara, Kerala

A Refresher Course in 'Quantum Mechanics' for College/University teachers/research scholars will be held at the Post-Graduate and Research Department of Physics, Bishop Moore College, Mavelikara, Kerala, during **5–18 May, 2014**. The Course is primarily aimed at teachers involved in teaching quantum mechanics at the UG/PG level although a few seats will be available for research scholars in physics. The Course will cover the basic and advanced topics of quantum mechanics, through lectures and tutorials. College/University teachers having at least a Master's degree in Physics are particularly encouraged to apply.

Topics: Most of the topics in a standard UG/PG level course syllabus will be covered. There will be four modules:

Module 1: Formulation, Schrödinger equation, angular momentum, H-atom;
Module 2: Scattering, time-independent perturbations, WKB, variational method;
Module 3: Symmetries and conservation laws, Klein–Gordon and Dirac equations;
Module 4: Time-dependent perturbation, field quantization.

Resource Persons:

Professors M Lakshmanan (Centre for Nonlinear Dynamics, Bharathidasan University, Tiruchirapalli), H S Mani (Chennai Mathematical Institute), G Rajasekaran (The Institute of Mathematical Sciences and Chennai Mathematical Institute) and Govind Krishnaswami (Chennai Mathematical Institute).

Course Director: Professor M Lakshmanan; **Course Coordinator:** Dr D Sajan

Teachers/research scholars who wish to participate should send their applications online using the following link. <http://web-japps.ias.ac.in:8080/Refreshcourse/BMC2014.jsp>

A printed copy of the application through the Head of the institution should be sent by speed post to: Prof. M Lakshmanan, Centre for Nonlinear Dynamics, Bharathidasan University, Tiruchirapalli 620 024, India. For any further query, please e-mail to: lakshman.cnld@gmail.com. Please note that participants have to attend the full duration of the Course.

Last date for receipt of applications: 15 February 2014.

