



Science Academies' Refresher Course on Mathematical Methods in Physics and their Applications

17–29 October 2016

at

Department of Physics, University of Mumbai

Sponsored by

Indian Academy of Sciences, Bengaluru

Indian National Science Academy, New Delhi

The National Academy of Sciences, India, Allahabad

A two week Refresher Course on the theme '**Mathematical Methods in Physics and their Applications**' will be held at University of Mumbai during 17–29 October 2016. The Course is primarily aimed at college teachers of Physics at the UG/PG level. It will cover basics of the subject through lectures and tutorials. Students pursuing Ph.D. degree in Physics may also apply. College/university teachers of Physics will be given preference.

Topics: The course will consist of six modules. In addition, there will be interactive sessions and tutorials aimed at clarifying basic concepts and improving the pedagogical skills of participants.

Module 1: Vector and Tensor Analysis

Module 2: Linear Vector Spaces

Module 3: Complex Analysis

Module 4: Introduction to Group Theory

Module 5: Ordinary differential equations and their applications in Physics

Module 6: Partial differential equations and their applications in Physics

Resource Persons: A. A. Rangwala (Univ. of Mumbai), Sreerup Raychaudhuri (TIFR), Amol Dighe (TIFR), Kedar Damle (TIFR), Dibyendu Das (IIT, Bombay), Amita Das (IPR, Gandhinagar)

Course Director: Amita Das (Institute for Plasma Research, Gandhinagar)

Course Coordinator: Anuradha Misra (Univ. of Mumbai, Mumbai)

Teachers who wish to participate should send their applications online using the following link:

<http://web-japps.ias.ac.in:8080/Refreshcourse/RMMPA.jsp>

Alternatively, applications may be sent by e-mail to rcmm2016@mu.ac.in.

Please note that participants have to attend the full duration of the Course. Selected participants will be provided with local hospitality and round trip bus/train (III A/C) fare by the shortest route.

Last date for receiving applications: **5 September 2016**.