



Science Academies' Refresher Course in Advanced Mathematics 15–30 November 2021



Pavate Institute of Mathematical Sciences (PIMSci.) and Department of Mathematics, Karnatak University, Dharwad 580 003

A Refresher Course in Advanced Mathematics will be held at the Pavate Institute of Mathematical Sciences (PIMSci.) and Department of Mathematics, Karnatak University, Dharwad 580 003, from 15 to 30 November 2021 for the benefit of faculty involved in teaching undergraduate and postgraduate courses. The aim of the 14 days' Refresher Course in Advanced Mathematics is to provide awareness of advanced concepts in Mathematics, such as Advanced Calculus, Distribution Theory, Metric Space, Complex Analysis, Fourier Analysis, Ordinary Differential Equations, Partial Differential Equations and Numerical Analysis. The lectures will be focused on fundamental aspects of above-mentioned topics including the real-world applications. The emphasis will be on providing sufficient theoretical background for the use of various techniques to the aspiring under graduate and postgraduate teachers working in the colleges as well as in the universities throughout India for their efficient teaching and fruitful research activities. Participants would get comprehensive knowledge on advances in Mathematics and its applications and few challenges in research, which are currently in progress at various esteemed institutes within India. This Refresher Course for 14 days would further definitely provide an opportunity to interact with subject experts and to establish a constructive network among teachers/researchers of various institutions.

The course is sponsored by Indian Academy of Sciences, Bengaluru, Indian National Science Academy, New Delhi and The National Academy of Sciences, India, Prayagraj. It will be directed by Prof. P. M. Patil, F.N.A.Sc., Pavate Institute of Mathematical Sciences (PIMSci.) and Department of Mathematics, Karnatak University, Dharwad 580 003, coordinated by Prof. H. S. Ramane, and co-coordinated by Prof. P. G. Patil, Department of Mathematics, Karnatak University, Dharwad 580 003. The topics and lecturers: Metric Space: Prof. A. Adimurthi (TIFR-CAM, Bengaluru); Distribution Theory: Prof. K. Sandeep (TIFR-CAM, Bengaluru); Complex Analysis: Prof. Ponnusamy (IIT Chennai); Fourier Analysis: Prof. A. K. Pani (IIT Mumbai); Ordinary Differential Equations: Dr Sivaji Ganesh (IIT Mumbai); Partial Differential Equations: Prof. P. M. Patil (Karnatak University, Dharwad) and Prof. K. T. Joseph (TIFR-CAM, Bengaluru); Numerical Analysis: Prof. G. D. Veerappa Gowda (TIFR-CAM, Bengaluru); Advanced Calculus: Dr Karthik Adimurthi (TIFR-CAM, Bengaluru).

Since 1999, more than 260 successful Refresher Courses have been organized throughout the country. It may be noted that UGC regulations include Refresher Courses in API scores for career advancement. Applications are invited from teachers with experience in teaching undergraduate and postgraduate courses in Mathematical Sciences. Motivated B.Sc. and M.Sc. Mathematical Sciences students may also apply. There will be 25 outstations and 10 local participants. Selected outstation participants will be provided with travel assistance (limited to three-tier A/C train fare), while all participants will be provided accommodation and local hospitality during the Course, in addition to the course material.

Interested applicants must submit their application ONLINE by clicking on the following link

<https://web-japps.ias.ac.in:8443/Refreshcourse/login.jsp>

A copy of the application form signed by the applicant should also be sent by Post to the **Course Coordinator**, at the address given below. In case of teachers, the form must also be signed and stamped by the Head of the applicant's institution stating that leave will be sanctioned if the applicant is selected for the Course. A recommendation letter from a teacher is essential for student applicants. Scanned copies of the duly signed documents sent by e-mail will also be accepted.

Address for communication: **Prof. H. S. Ramane** and **Prof. P. G. Patil**, Department of Mathematics, Karnatak University, Pavate Nagar, Dharwad 580 003, Karnataka.
e-mail: rcam2021kud@gmail.com, Cell Phone: +91 99450 31752 and +91 94484 08215.

Last date for the receipt of applications: **15 October 2021**

Selected participants will be informed by: **20 October 2021**