



## Science Academies' Refresher Course on Statistical Physics and its application

at

**Department of Physics, Tripura University, Agartala, Tripura**

**2 - 15 May 2017**

Sponsored by

**Indian Academy of Sciences, Bangalore**

**Indian National Science Academy, New Delhi**

**The National Academy of Sciences, India, Allahabad**

Statistical physics explains and predicts properties of matter in terms of its constituent particles and has played a fundamental role in the development of modern science. It describes the emergence of new behavior from interactions of many degrees of freedom and as such has found applications in diverse fields e.g. social, biological and engineering apart from physical sciences. Two-week refresher course introduces the central concepts and tools of statistical physics, which includes Probability Theory, Basic Concepts of Statistical Physics, Basic Principles of quantum Statistical Physics, Stochastic Processes, Phase Transition & Critical Phenomena, Non-equilibrium Statistical Physics and Numerical Simulations and its applications.

**List of speakers:** Prof. Yashwant Singh (BHU, Varanasi), Prof. Deepak Dhar (IISER, Pune), Prof. S Dattagupta (JNC SAR, Bengaluru), Prof. Sanjay Puri (JNU, New Delhi), Prof. Prabodh Shukla (NEHU, Shilong), Prof. J. K. Bhattacharjee (HRI, Allahabad) and Prof. Mangal Mahto (NEHU, Shilong).

Applications are invited from teachers/researchers with experience in teaching undergraduate and postgraduate courses in Physics. Maximum 35 applications will be considered and teachers who wish to participate in the Refresher Course may apply through proper channel. Number of seats is restricted to 10 from Tripura and 25 from the rest of country. It is also essential to submit a brief statement (between 250 and 500 words) as to why they think the Course will help to improve their classroom teaching of Statistical Physics. Preference will be given to the participants from the North East Region.

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**Applications should be submitted ONLINE by clicking the following link:**

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

A printed copy of the application approved by the Head of the institution should be sent by speed post to: The Course Coordinator: **Dr. RATAN DAS, Department of Physics, Tripura University, Suryamaninagar-799022, West Tripura, Tripura, India. Soft copy of the same may be sent to statphys17@gmail.com** Last date for receipt of applications: **April 18, 2017**. Outstation candidates will be provided local hospitality and round trip bus/train (three- tier AC) fare by the shortest route. In exceptional case, return airfare from Kolkata to Agartala only may be provided. Please note that participants have to attend the full duration of the Course.

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**Course Director:** Prof. Sanjay Kumar, Department of Physics, Banaras Hindu University, Varanasi

**Course Coordinator:** Dr Ratan Das, Department of Physics, Tripura University Agartala, Tripura