Refresher Course in Theoretical Physics
organised by
Indian Academy of Sciences
in association with
University of Hyderabad, Hyderabad, A.P
November 18-30, 2001

A Brief Report

1. Introduction:

This Refresher Course is the fifth one arranged by the Academy since this programme was initiated in late 1999. It was held in association with the University of Hyderabad at Hyderabad.

The Refresher Course was announced in June and July 2001 issues of Resonance and also in Current Science. Interested teachers from all parts of the country were invited to apply before the last date of 1 September 2001. A copy of the announcement is given in Annexure A.

2. Selection Procedure:

The total number of application received by the last date of 1 September 2001 was 49. Two of the resource persons- N. Mukunda and S Chaturvedi- met in Hyderabad and selected 26 applicants on an all India basis after scrutinising all applications. Letters of invitation were sent on 15 September 2001 with the last date of confirmation of participation set to 15 October 2001. Out of the twenty six to whom the invitation letters were sent, 18 confirmed their participation. Seven teachers from the University of Hyderabad were also included as participants. Out of the eighteen outstation participants, twelve eventually turned up for the course. Two expressed their inability to
participate as they could not obtain leave from their institutions and one could not come due to viral fever. The remaining three, all from A.P., did not even bother to send a regret letter. The total strength of the participants was thus 19 plus about seven research scholars from the University of Hyderabad who regularly attended the lectures and tutorials making a total of 26. The list of participants together with their affiliations and addresses is given in Annexure B.

3. Course Programme;

There were three hours of lectures and three hours of tutorials every day. Details of the daily schedule together with the list of speakers is given in Annexure C. In addition, there were two special lectures - one by Prof Mukunda on *Symmetries and Conservation laws in classical and quantum physics* and one by Prof Simon *Quantum information theory and quantum computation*. The quality of teaching and the earnestness of the entire effort was of the highest order and was greatly appreciated by the participants.

Participants were asked to purchase books worth Rs 750/- and send the bills to the Academy for reimbursement.

4. Local Arrangements:

The lectures were arranged in the seminar hall of the Centre for Distance Education, University of Hyderabad located quite close to the Guest House where all the participants and the resource persons were housed. Participants were generally happy with the Guest House arrangements and the Guest House staff.

Two special dinners, one with the Fellows of the Academy at the University of Hyderabad and the other with theoretical physicists among the physics faculty at Hyderabad as special invitees were organised.

A local sight seeing tour to Osman Sagar, Qutub Shahi Tombs and Golconda fort in the afternoon of the intervening Sunday was immensely appreciated by the participants.
5. Feedback from Participants:

The feedback from the participants was excellent as is evident from the sentiments expressed in the feedback forms (Annexure D). In private conversations all participants expressed their gratitude to the Academy for organising such courses.

6. Estimate of expenses:

Annexure E gives the statement of the expenditure incurred on the Refresher Course.

7. Concluding Remarks:

The degree of motivation and the desire to learn among the participants was extremely gratifying. The fact that one had teachers from all over India who had travelled great distances to come to the Course, unconcerned about the fact that this Course may not be useful to them for promotions as per the UGC rules was really touching. For them it was not only an opportunity to refresh their knowledge and understanding of quantum mechanics and topics in mathematical physics but also an introduction in teaching skills. All the resource persons had distinctive teaching styles and one had a brilliant display of techniques for developing a subject top down, bottom up, left to right and right to left.

On a personal note, though not much of an organiser, I really enjoyed coordinating this course.
# All India Refresher Course In Theoretical Physics

**University of Hyderabad**

## Inaugural Function

Inauguration of the refresher Course by the acting Vice Chancellor, Prof. A.K. Bhatnagar

**Venue** – Seminar room of the Centre for Distance Education, University of Hyderabad.

**Date** – 18th Nov 2001

**Time** – 9:30 am to 10:00 am

## Academic Programme

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<th>Date</th>
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NM: Prof. N. Mukunda; RJ: Prof. R. Jagannathan; AKK: Prof. AK Kapoor; RS: Prof. R. Simon
QM: Quantum Mechanics; MP: Mathematical Physics

## Valedictory Function

**Chief Guest**: Prof. SN Kaul (Dean School of Physics)

**Venue** – Seminar room of the Centre for Distance Education, University of Hyderabad.

**Date** – 30th Nov 2001

**Time** – 3:45 pm
ALL INDIA REFRESHER COURSE IN THEORETICAL PHYSICS,  
University of Hyderabad Hyderabad 500 046, 18-30 Nov. 2001.  
Participants

1. S. Chitra  
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