

① Report

Final Report on the Science Academies' Refresher Course in Statistical Physics held at Nehru Arts and Science College, Kangangad (May 8 - May 21, 2013)

This was the second Refresher Course on Statistical Physics. The previous one was held at the same venue in 2012. Some of the lecturers were the same as last year (Prof. Dasgupta, Dhar, Murthy), and some were new (Prof. Mohanty, Shenoy, Rajesh). Also, we had new people to conduct the tutorials (Prof. Bannur and Sumedha).

The list of participants, detailed outline of courses, and the time table are given as separate attachments. The scanned copies of the 30 filled feedback forms received are being attached separately. The outline of lectures was sent to participants before the course started, as was suggested by participants in the previous Course.

One special feature of this Course was a guest lecture by Prof. Anuradha Banerjee of I.I.T. Madras about effective teaching strategies. There was a fair amount of scepticism initially ("this may work in US, and at IIT, but will not work in Kerala"), but actually this lecture generated much interest, and may have nudged some participants to be more innovative in their own teachings. We recommend that some such activity be included in future such courses, and perhaps allotted more time in the tutorials.

One problem that was not fully appreciated by some of the organizers and lecturers earlier was some overestimate in their expectation of what the participants may be safely assumed to know. [To give a concrete example: The answer to the question "If x is a random variable uniformly distributed in the interval $[0,1]$, what is the probability distribution of the random variable $y=x^2$?" was not obvious to a good fraction of the participants.] The format of tutorials we used was not able to bring out such problems fully, as the discussion time was taken up by more vocal participants. We suggest that future Courses have a more effective way of taking feedback continuously from participants. Some of these techniques were suggested in Prof. Banerjee's lecture, and we would certainly be happy to share them with the organizers of future Refresher Courses.

There was a good deal of discussion amongst the participants during the tutorials, and also outside the scheduled program. A day picnic at Bekal Fort was enjoyed by all.

On the whole, we think that the Course was moderately successful in its aims. The participants were quite enthusiastic, and the tutorial sessions have been very useful in clearing some confusions about the basic concepts. We strongly feel that this activity should be continued.

C. Dasgupta, Deepak Dhar, R. Rajesh, and K. M. Udayanadan

Time Table for Refresher Program on Statistical Mechanics

WEEK I (08/5/2013-14/5/2013)

Date/Time	8/5 (W)
09:00-09:45	Inauguration
09:45-10:15	Tea
10:15-11:15	DD } CD }
11:15-12:15	CD }
12:15-13:45	Lunch
13:45-14:45	KPN
14:45-15:00	Tea
15:00-16:30	VM(Tut)

Date/Time	9/5 (Th)	10/5 (F)	11/5 (Sa)	13/5 (M)	14/5 (Tu)
09:30:10:30	DD ?	DD }	DD	DD ?	DD
10:30:10:45	Tea	Tea	Tea	Tea	Tea
10:45-11:45	CD	CD	CD	CD	CD
11:45-12:00	Break	Break	Break	Break	Break
12:00-13:00	KPN	KPN	KPN	KPN	KPN
13:00-14:15	Lunch	Lunch	Lunch	Lunch	Lunch
14:15-16:30	VM (Tut) + Tea	VM (Tut) + Tea	VM (Tut) + Tea	VM (Tut) + Tea	VM (Tut) + Tea
18:30-	Dinner	Dinner	Dinner	Dinner	Dinner

DD: Deepak Dhar
 KPN: K. P. N. Murthy
 CD: Chandan Dasgupta
 VM: Vishnu M. Bannur

WEEK II (15/5/2013-21/5/2013)

Date/Time	15/5 (W)	16/5 (Th)	17/5 (F)	18/5 (Sa)	20/5 (M)
9:30-10:30	RR	RR	RR	RR	RR
10:30-10:45	Tea	Tea	Tea	Tea	Tea
10:45-11:45	SS	SS	SS	SS	SS
11:45-12:00	Break	Break	Break	Break	Break
12:00-13:00	PKM	PKM	PKM	PKM	PKM
13:00-14:15	Lunch	Lunch	Lunch	Lunch	Lunch
14:15-15:15	S (Tut)	S (Tut)	S (Tut)	AB	S (Tut)
15:15-15:25	Tea	Tea	Tea	Tea	Tea
15:25-16:30	S(Tut)	S(Tut)	S(Tut)	S(Tut)	S(Tut)
18:30-	Dinner	Dinner	Dinner	Dinner	Dinner

Date/Time	21/5 (Tu)
9:15-10:15	RR
10:15-10:30	Tea
10:30-11:30	SS
11:30-12:30	PKM
12:30-14:00	Lunch
14:00-	Closing

PKM: P. K. Mohanty
SS: Subodh Shenoy
RR: R. Rajesh
S: Sumedha
AB: Anuradha Banerjee

SCIENCE ACADEMIES' REFRESHER COURSE IN STATISTICAL PHYSICS – MAY 8 – 21 2013
AT NEHRU ARTS & SCIENCE COLLEGE- KANHANGAD

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Guest Lecturer:

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