

# Khagol

Inter-University Centre for Astronomy and Astrophysics

An Autonomous Institution of the UGC



No. 11

THE IUCAA BULLETIN

July 1992

## Welcome to IUCAA Family

IUCAA is happy to announce the selection of the third batch of Senior Associates and Associates who are selected for a tenure of three years beginning July 1, 1992.

### Senior Associates

B. Basu, Calcutta University, Calcutta  
Ashok K. Goyal, Hans Raj College, Delhi  
B. Ishwar, Bihar University, Muzaffarpur  
L. Radhakrishna, Shivaji University, Kolhapur  
R.K. Thakur, Ravishankar University, Raipur

### Associates

Farooq Ahmad, University of Kashmir, Srinagar  
S.H. Behere, Marathwada University, Aurangabad  
D.P. Datta, NERIST, Arunachal Pradesh  
K. Indulekha, M.G. University, Kottayam  
Z.H. Khan, Jamia Millia Islamia, New Delhi  
S.R. Prabhakaran Nayar, University of Kerala, Trivandrum  
U.S. Pandey, University of Gorakhpur, Gorakhpur  
Abdul Qaiyum, Aligarh Muslim University, Aligarh  
Avinash Sharma, Kurukshetra University, Kurukshetra  
D.B. Vaidya, Bahauddin Science College, Junagadh

## One more shift.....

As the institutional buildings become ready for occupation, we are moving once again. The Hostel has already been occupied and by the time this issue of *Khagol* reaches your hands, our academic and administrative offices will have completed their transition. We hope that the IUCAA Canteen, Library and Laboratories and the Computer Centre will have settled into their proper locations by Diwali.

## Seminars

- *Dipankar Banerjee* (PRL, Ahmedabad) **Spatio-kinematic studies of planetary nebulae** (April 7)
- *A.K. Sen* (PRL, Ahmedabad) **Photopolarimetric studies of comets** (April 13)
- *N.D. Haridas* (MatScience, Madras) **Gauge independence in quantum gravity** (April 14)
- *Arati Chokshi* (Caltech, USA) **Simulations of faint galaxy fields** (April 29)
- *P. Bhattacharjee* (TIFR, Bombay) **Ultrahigh-energy cosmic rays from topological defects** (April 30)
- *R. Ramakrishna Reddy* (Sri Krishnadevaraya University, Anantapur) **Spectrochemical analysis** (May 12)
- *K.N. Iyer* (Saurashtra University, Rajkot) **Computerised ionospheric tomography** (May 22)
- *J. Anosova and L. Kiseleva* (St. Petersburg University, Russia) **On actual presence of discordant redshifts of the galaxies in the compact groups** (May 27)
- *S. Mukherjee* (North Bengal University, Siliguri) **Problems in higher dimensional cosmology** (June 12)

### Visitors

- D.P.K. Banerjee, Physical Research Laboratory, April 5-8
- T.P. Prabhu, Indian Institute of Astrophysics, April 12-13
- A.K. Sen, Physical Research Laboratory, April 12-14
- C. Jog, Indian Institute of Science, April 13
- N.D. Hari Dass, Institute of Mathematical Sciences, April 13-15
- S.M. Alladin, Osmania University, April 20-25; May 21-June 3
- S.D. Verma, Gujarat University, April 27-28; May 22-June 7
- S. Ramakrishna Reddy, Sri Krishnadevaraya University, April 27-May 15
- H.L. Duorah, Gauhati University, April 27-28
- K.B. Bhatnagar, Zakir Husain College, April 27-29; May 27-June 11
- S.G. Tagare, University of Hyderabad, May 1-June 24
- K.N. Iyer, Saurashtra University, May 7-24
- S. Banerjee, University of Burdwan, May 9-31
- S. Mukherjee, North Bengal University, May 9-June 18
- G.M. Ballabh, Osmania University, May 11-June 4
- A.R. Prasanna, Physical Research Laboratory, May 13-17
- K.S.V.S. Narasimhan, May 17-June 16
- Ramesh Tikekar, Sardar Patel University, May 18-June 21
- H.I. Pandya, Physical Research Laboratory, May 20-22
- R.S. Bisht, Physical Research Laboratory, May 20-24
- G. Yellaiah, Kakatiya University, May 20-26
- B.N. Dwivedi, Banaras Hindu University, May 20-30
- V.R. Venugopal, Madurai Kamaraj University, May 20-June 30

- P. Khare, Utkal University, May 21-June 20
- L.M. Saha, Zakir Husain College, May 27-June 11
- Udit Narain, Meerut College, June 1-July 20
- S. Chandra, University of Gorakhpur, June 3-17
- S.K. Pandey, Ravishankar University, June 4-29
- D.C. Srivastava, University of Gorakhpur, June 5-27
- P.V. Kulkarni, Physical Research Laboratory, June 8-11
- T. Padmanabhan, Tata Institute of Fundamental Research, June 15-16
- A.K. Sapre, Ravishankar University, June 29-July 15

### Vacation Students' Programme

IUCAA is conducting its Vacation Students' Programme (VSP) this year during June 1-July 16. There has been a considerable response from various universities in the country and only 15 students could be selected, of which 13 students have joined the programme and 12 are expected to complete the programme schedules under the supervision of 9 of the IUCAA faculty members and post-docs. It is heartening to note that most of them are highly motivated and putting their best efforts to qualify the preselection of research scholars for the next academic year, subject to completion of their degrees at their respective institutions. Some of the IUCAA lecture halls and the living apartments and hostel blocks are made ready and VSP students literally inaugurated the lecture halls.

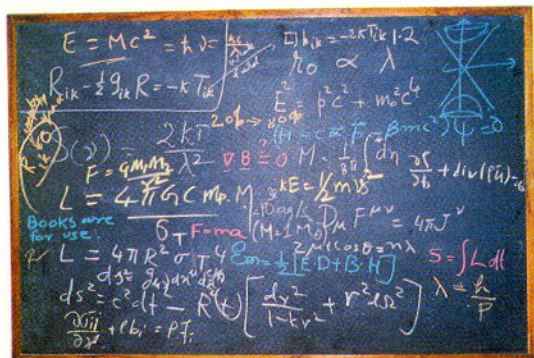


## DST Summer School

An Introductory Summer School in Astronomy and Astrophysics for students who have just completed their undergraduate studies was conducted at IUCAA from June 3-27, 1992. The school, organised jointly with the National Centre for Radio Astrophysics, was one in a series of annual schools sponsored by DST and held alternately in Bangalore and Pune. About 40 students with a background in physics and engineering attended the school. Lectures were delivered by academics in IUCAA and NCRA, as well as visiting faculty from institutions in other cities. Students were also assigned projects, and did a commendable job with them, as was evident from the short talks that they delivered at the end of the school. It is hoped that the introductory lectures as well as the interaction with astronomers will have motivated some of the participants to seek a research career in astronomy and astrophysics. Sanjeev Dhurandhar of IUCAA and Vijay Kapahi of NCRA were the Directors of the School.

## IUCAA Computer Centre

A dedicated four-wire data-link has recently been established between IUCAA and NCST, Bombay. This is used for E-mail as well as for data transfer from computers abroad and in India in Centres which have a similar facility. Using this link it is possible to access computers and databases anywhere in the world. The data link will soon be used by university departments and institutions in Pune for E-mail, resulting in very substantial savings in cost over individual dial-up links to Bombay. Taking this into account, the Department of Electronics has kindly consented to underwrite the expenses of the data link, for which the academic community in Pune is most grateful.



## Visits Abroad

Ajit Kembhavi and Naresh Dadhich of IUCAA spent two very exciting and eventful weeks in the "Middle Kingdom" in the month of May. The purpose of the visit was to explore the possibilities for long term research collaborations, joint schools and workshops and so on. In this connection Kembhavi and Dadhich visited astronomy and physics departments in Beijing, Shanghai and Nanjing and gave talks and had detailed discussions. They found a great deal of enthusiasm amongst Chinese astronomers for joint work with their Indian counterparts, and are now trying to obtain funds to start the ball rolling. Needless to say, in addition to everything else the journey was a great scenic and culinary delight.

## IUCAA's Academic Calendar

### August 1992

- 3 - 8 Minischool on Introduction to Ashtekar Variables, at IUCAA
- 17 IUCAA-NCRA Graduate School First Semester begins
- 24 - 27 Workshop on Bhutas : The Nature of Matter (Jointly with Indira Gandhi National Centre for Arts), at IUCAA

### September

- 7 - 12 Regional School on Introductory Astronomy, at Jalna

### October

- 1 - 20 Workshop on Telescope Making, at IUCAA
- 26 - 31 Workshop on High Resolution Spectroscopy (Jointly with PRL), at Mt. Abu

### November-December

- 23 November- DST sponsored SERC School on
- 11 December Active Galactic Nuclei and Quasars, at IUCAA

## December

- 14 - 23 Workshop on Galaxy Formation (Jointly with TIFR), at IUCAA
- 20 IUCAA-NCRA Graduate School First Semester ends
- 29 Foundation Day
- 29 - 30 Dedication Seminar to launch IUCAA's Institutional Buildings
- 30 - 31 Scientific Advisory Committee Meeting

## January 1993

- 4 - 9 Minischool on Photometry with Small Telescope, at IUCAA
- 15 IUCAA-NCRA Graduate School Second Semester begins
- 16 - 17 3rd National Amateur Astronomers' Meet, at Ahmedabad

## February

- 15 - 20 Minischool on Pulsars, at Hyderabad

## March

- 1 - 6 Regional School on Introductory Astronomy, at Trivandrum

## April-May

- 26 April - Miniworkshop on Gravity Waves, at IUCAA
- 1 May

## May

- 3 - 8 Miniworkshop on Cataclysmic Variables, at IUCAA
- 9 IUCAA-NCRA Graduate School Second Semester ends
- 10 - 28 Refresher Course in A & A for College and University teachers, at IUCAA

## June-July

- 7 June - Vacation Students Programme
- 10 July

- July Selection of Research Scholars

### An Astrophysics Text from India

We are glad to report that K.D. Abhyankar, UGC Emeritus Professor at the Osmania University and a member of IUCAA's Governing Body has written a 543 page comprehensive text book entitled "*Astrophysics : Stars and Galaxies*" published by Tata-McGraw Hill. The book aims at the honours and postgraduate students of Physics in the Indian Universities, and should be welcomed by both the teachers and students of A & A. It presents an up-to-date account of our present state of understanding the Universe ranging from stars to cosmology, at a level in between that of the 'beginner' and 'specialist' texts.

### A Practical Advice

Sir Harold Jeffreys, the Plumian Professor of Astronomy and Experimental Philosophy at Cambridge in the 1950s was a distinguished theoretician and geophysicist. Once he was attending a meeting in London as a consultant to an oil company. He sat through the meeting puffing quietly at his cigarette as the company scientists discussed their problems. About halfway through the morning, they stopped and asked "What do you think, Sir Harold?" "I think it is time for coffee", he replied. After coffee there ensued another discussion with Sir Harold, a quiet listener. At the end of the session again he was asked: "What do you think of it, Sir Harold?" The answer was, "I believe it is time for lunch". The same drill was repeated in the afternoon except that then it was time for tea. At the end of the meeting the scientists put the final question: "Well, now that you have heard it all, what do you make of it, Sir Harold?" The Oracle replied: "I am glad it is your problem; not mine".

### How To Communicate With IUCAA?

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