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KHAGOL

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IUCAA Silver Jubilee Lecture

IUCAA Silver Jubilee lecture, titled "Gravitation and the Cosmos: 100 Years after Einstein's Discovery of General Relativity", was delivered by Professor Abhay Ashtekar, Director, Institute for Gravitation and the Cosmos, Penn State University, USA, on December 29, 2014 in the Chandrasekhar Auditorium.

The year 2015 marks the centennial year of Einstein's discovery of the theory of general relativity, which represents an unprecedented combination of mathematical elegance, conceptual depth and observational success. The talk began with a brief account of this discovery through numerous historical anecdotes. Professor Ashtekar illustrated a century of successive triumphs of general relativity, as it expanded its scientific reach. Advances in diverse directions continue to open new horizons even today. This is why researchers who study general relativity in a serious manner continue to be enchanted by its magic even a century after its discovery.

The lecture toured through the remarkable success story of general relativity, emphasising its singular role in the genesis of the now fairly well established modern cosmology, and in predicting the existence

of black holes that have now credible observational support. The audience was reminded, time and again, that observational verification determined the true merit of any scientific enterprise. Professor Ashtekar related interesting thoughts on universe that were propounded by many great intellectuals throughout human history. While many of these can be argued to have already captured some essence of contemporary cosmology, the main distinctive contrast is in the concrete matrix of theoretical predictions and observational verification that underlies recent advances in modern cosmology. He showcased the exquisite measurements of cosmic microwave background fluctuations from the WMAP and Planck space missions that has put modern cosmology on firm scientific turf. Similarly, he mentioned the fine astronomical observations that now lend credence to the existence of stellar mass black holes, as well as gigantic super massive ones residing at the centres of galaxies.

At the turn of the century, advances in science and technology continue to open new horizons in general relativity. On the experimental front, the imminent possibility of direct detection of gravitational waves (GW) by the advanced generation of laser interferometric gravitational wave observatories promises observational confirmation of yet another fascinating predictions of general relativity. The lecture conveyed the excitement with which the entire science community awaits this breakthrough. He also heralded the LIGO-India mega science project proposal to build a GW observatory on Indian soil in collaboration with LIGO Laboratories, USA, which would open a new window of GW astronomy into the universe. Professor Ashtekar commended IUCAA for taking on a lead role together with two other partner national laboratories, Raja Ramanna Centre for Advanced Technology, Indore; and Institute for Plasma Research, Gandhinagar. On the theoretical front, he mentioned the ongoing challenge of unifying general relativity with quantum physics that would lead to a successful theory of quantum gravity. He modestly devoted only brief final minutes on the remarkable strides made within loop quantum gravity that is based on new mathematical formulation of general relativity, which he has championed over the past three decades. The lecture was very well attended and was followed by an interesting question-answer session.

International Conference on Coupling and Dynamics of the Solar Atmosphere

An international conference on "Coupling and Dynamics of the Solar Atmosphere" was organized at IUCAA in the Chandrasekhar Auditorium during November 10-14, 2014. This was the first such conference held at IUCAA. There were about 130 participants from all over the world, out of which about 50% delegates were from abroad. Various important questions related to heating of the upper layers of the solar atmosphere, and their magnetic coupling and eruptive phenomena were discussed, including the generation of magnetic field deep down in the interior. There were 15 keynote lectures, 17

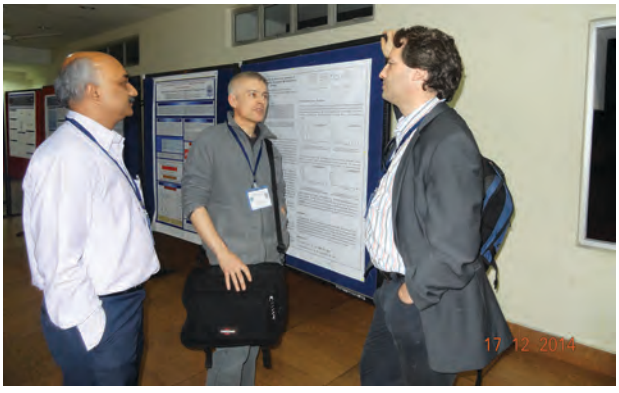
invited lectures and 26 contributory lectures. In addition, there were about 70 poster presentations.

The conference was started with remarks by Ajit Kembhavi, Director, IUCAA, who mentioned about various upcoming and planned projects, and the plenary lecture on Major Challenges and Perspective in Solar Physics was by Sami Solanki of Max-Planck Institute for Solar System Research, Goettingen.

The conference ended with a session on current and upcoming solar observing facilities in India and there were talk on the Multi-Application Solar Telescope (MAST), National Large Solar Telescope (NLST) and the proposed Aditya-L1 mission. The talk on Aditya-L1 mission was given by S. Seetha, Director, Space Science Programme Office, ISRO Satellite Centre, Bengaluru.

International Conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014)

IUCAA and Tezpur University have jointly organized an International Conference on Interstellar Dust, Molecules and Chemistry (IDMC-2014) during December 15 - 18, 2014, at Tezpur. The conference was aimed to provide a platform for expert discussions and presentations with ample opportunities for the young researchers to interact, and take up challenging problems in this field. There were 82 participants including 24 from abroad, representing 11 countries. The sessions consisted of 15 review talks, 18 contributory lectures, and 38 poster presentations. The wide range of topics covered included: Dust – within the galaxy and in external galaxies, interstellar dust, circumstellar dust, cometary dust and dust models; Molecules – synthesis and mid-IR properties of PAHs, fullerenes and the diffuse interstellar bands; and Chemistry – H2 formation on grains, chemical evolution, chemical simulations, observations along AGB/post-AGB objects. The presentations included: data from ALMA, AKARI, CHANDRA, HERSCHELL, SPITZER, and other telescopes. Recent advances in observational, laboratory and theoretical studies brought out the importance of interdisciplinary research in this field. A cultural evening showcasing the various dance forms of North-Eastern India, and a special lecture on Thirty Metre Telescope by Ajit Kembhavi added to the content of the conference. The deliberations of the conference are available on the web site http://www.iucaa.ernet.in/~idmc2014. The conference was coordinated by Ranjan Gupta, Shantanu Rastogi, Gazi Ahmed and Amit Pathak.



Workshop on Cosmology

IUCAA Resource Centre , Kochi in collaboration with S.H. College, Thevara, Kochi has organized a Workshop on Cosmology during September 10 - 13, 2014 at the Department of Physics of S.H. College. This workshop was meant for postgraduate students in Physics in Kerala, and there were about 50 participants. The resource persons were: Sanjit Mitra (IUCAA), Anand Narayanan (IIST), K. Indulekha (M. G. University), Ninan Sajeeth Philip (St. Thomas College, Kozhencheri), Minu Joy (Alphonsa College, Pala) and V. C. Kuriakose (CUSAT). In addition to the lectures on conventional topics such as Tensor Analysis, General Theory of Relativity and Cosmology, there were lectures on specialized topics like CMBR, Observational Cosmology and Computational Cosmology. Two sessions each were set apart for tutorials and hands-on training. These sessions were handled by senior research scholars: Jishnu Suresh and R. Tharanath (CUSAT), Sheelu Abraham (St. Thomas College, Kozhencheri) and Reju M. Sam (Pondicherry University). The participants actively involved in these sessions and also during the entire period of the workshop. The resource persons were

available for discussions with the students even after their lectures and all the local resource persons were present throughout the programme. The workshop was inaugurated by K. Babu Joseph (Former Vice-Chancellor, CUSAT) by giving a talk on Perspectives in Cosmology. Nijo Varghese of S. H. College, Thevara and Joe Jacob of Newman College, Thodupuzha were the local organizers of this workshop.

Workshop on Observational Aspects of Astrophysics and Cosmology

A two day workshop on Observational Aspects of Astrophysics and Cosmology' was conducted during November 3 - 4, 2014 at the Department of Physics, Visva-Bharati, Santiniketan, West Bengal. The workshop was jointly sponsored by Inter-University Centre for Astronomy and Astrophysics and Visva-Bharati. The programme was attended by 60 participants (mostly research scholars) from different parts of the country. The academic staff of the department also participated actively in the workshop.

The inaugural programme was presided over by Sushanta Dattagupta, Vice-Chancellor, Visva-Bharati. Sudhendu Mandal, Principal, Siksha Bhavana, Visva-Bharati delivered the welcome address and Somenath Chakraborty, Head of the Department of Physics, Visva-Bharati expressed the aims and objectives of the workshop.

The resource persons were Asis Chattopadhyay, (Calcutta University), Anjan Ananda Sen, (Jamia Millia Islamia, New Delhi), Ranjeev Misra, (IUCAA), Sanjit Mitra, (IUCAA), and Tirthankar Roy Choudhury, (NCRA-TIFR).

The topics covered by different resource persons were: (i) Cosmology with neutral hydrogen

distribution, (ii) Astrostatistics, (iii) Observational evidence for black holes, (iv) Radiative processes in astrophysics, (v) Dark energy, and (vi) Cosmic microwave background.

Two hands-on sessions were conducted by Sanjit Mitra and Anjan Ananda Sen, where the participants got a flavour of various techniques that are used for data handling.

An evening colloquium for the undergraduate students was delivered by Narayan Banerjee, IISER, Kolkata on Black Holes. This was followed by a panel discussion on career in Astrophysics and Cosmology, which was conducted by Ranjeev Misra and Narayan Banerjee.

Sudipta Das and Biswajit Pandey were the coordinators of the workshop.

Workshop on Current Trends in Near Infrared Astronomy in India

A workshop on Current Trends in Near Infrared Astronomy in India was jointly organized by IUCAA, TIFR, IIA during November 25 - 27, 2014 at TIFR Balloon Facility, Hyderabad. The major topics covered were: Star Formation and Interstellar Medium, Interstellar and Circumstellar Dust, Lunar Occultation Technique, Late Type Stars, Extra-Solar Planets, Brown Dwarfs, AGNs, QSOs, Novae and Supernovae under the theoretical and observation sessions. Under the NIR Instrumentation session, existing NIR Instrumentation and Future Instrumentation were covered. There was also a set of posters displayed during the workshop describing various aspects on above topics. Further, there was a practical session organized for NIR Spectroscopic Data reduction. The talks were given by participants from TIFR, IUCAA, IIA, ARIES, PRL, IIST, BITS, MJCET, Assam University, University of Delhi, SNBNCBS, IOA, Tokyo, and NCRA-TIFR.

There were about 70 participants who were actively involved in the discussion sessions.

There was an atmospheric demonstration balloon launched for the participants on November 26, 2014. Ranjan Gupta was the IUCAA coordinator, along with D. K. Ojha from TIFR and G. C. Anupama from IIA.

New Arrivals

Arunima Banerjee joined IUCAA as a DST-INSPIRE Faculty Fellow in October 2014. Earlier she was a Post-doctoral Visiting Scientist at the National Centre for Radio Astrophysics, Tata Institute of Fundamental Research, Pune, and prior to that an Integrated Ph.D. student at the Indian Institute of Science, Bengaluru, obtaining a Masters in Physics and a Doctorate in Astrophysics from the Department of Physics in 2007 and 2012 respectively. Her research focusses on the modeling of the structure and dynamics of galaxies and their dark matter halos, with an emphasis on superthin, dwarf irregulars, and most recently, lenticular galaxies. She is the recipient of the Kumari L. A. Meera Memorial Medal for the best Ph.D. thesis in theoretical physics from the Indian Institute of Science, Bangaluru (2011 - 2012) and the Justice Oak Best Thesis Award, Astronomical Society of India (2012).

Sandipan Sengupta joined as a Post-doctoral Fellow (PDF) at IUCAA in November 2014. His general area of interest is classical and quantum gravity. He was a PDF in the Theoretical Physics group at Raman Research Institute, Bengaluru. There he has worked on topics related to the canonical quantization of gravity. He did his Ph.D. in 2011 at the Institute of Mathematical Sciences, Chennai. During that period, his work was based on various aspects of the Hamiltonian theory of gravity and loop quantum cosmology. He has received the V. V. Narlikar best Ph.D. thesis award at the 27th IAGRG meeting in 2013. His current research interests are based on non-perturbative quantum effects in gravity, black hole physics and cosmology.

Farewell to...

Charles Jose, who has joined the S. B. College, Changanacherry, Kerala, as an Associate Professor.

Isha Pahwa, who has joined the Leibniz Institute for Astrophysics, Postdam, Germany, as a Post-Doctoral Fellow.

Shruti Tripathi, who has left IUCAA.

Congratulations to...

Jayant Narlikar on being selected for ***Sahitya Akademi Award*** for his autobiography in Marathi entitled 'Char Nagaratil Maze Vishwa'.

T. Padmanabhan on being conferred with ***the Goyal Prize*** in Physical Sciences for 2012-13 by Kurukshetra University.

Proposals for holding Workshops/Schools Outside IUCAA

Proposals to conduct workshops/schools in Astronomy and Astrophysics or related areas are invited from university departments/affiliated colleges and the same may be sent to the Administrative Officer (Core Programmes) IUCAA (email: aocp@iucaa.ernet.in), by March 31, 2015 (for events to be conducted during August 2015 - July 2016), so as to be included in the academic calendar for the next academic year.

The following details should be given while sending the proposals: (i) the title (topic), (ii) duration of the workshop/school, (iii) topics to be covered and number of lectures in each topic, (iv) the level of audience and their number, (v) the number of resource persons available locally and the number of resource persons expected from IUCAA, (vi) a description of the facilities available, and (vii) the budget estimates (clearly stating the support offered by the host university/institute).

It is generally expected that infrastructural facilities and accommodation to the participants as well as the resource persons will be provided by the host institution. Other expenses will be borne by IUCAA. The proposers are encouraged to consult IUCAA faculty while framing the proposal.

Once the workshop/school is approved, IUCAA will nominate a coordinator from its faculty, who will interact with the organiser in relation to the academic programme, budget, and identifying and approaching the resource persons.

Seminars

15.10.2013	Rishi Khatri on ***After Planck: The road to observing 17 e-folds of inflation.***
12.11.2013	Shashi Kanbur on ***The non-linearity of the CEPHEID period – Luminosity relation.***
28.11.2013	Ram Gopal Vishwakarma on ***Introduction of T_{ik} : Einstein's real biggest blunder.***
05.12.2013	Tomaso Belloni on ***Black holes and neutron stars in our Galaxy as laboratories for strong gravity.***

IUCAA Preprints

IUCAA preprints released during October - Decmber 2014 can be obtained from the IUCAA library (library@iucaa.ernet.in). The preprints can also be freely downloaded from http://www.iucaa.ernet.in/~library/main.html.

Visitors
(October - December 2014)

Aakash, Chaitanya Afle, Anamika Agrawal, Anju Kumari Agrawal, Bobomurat Ahmedov, Mohd. Amir, G.C. Anupama, Ligeia Aranguiz, Archana, Jagdish Arora, Abhay Ashtekar, Thomas Aur De Hyde, M. Azam, Arun Babu, Melbin Baby, Kalyani Bagri, Ayan Banerjee, Dipankar Banerjee, Srikumar Banerjee, Sumita Banerjee, S.A. Bari, Tomaso Belloni, Jhumpa Bhadra, Swetha Bhagwat, Mohit Bhardwaj, Uddipta Bhardwaj, Naseer Iqbal Bhat, Jitesh R. Bhatt, K.G. Biju, Atreyee Biswas, Tultul Biswas, Vikas Bothe, Hannes Breytenbach, David Buckley, Claude Catala, Brian Chaboyer, R.K. Chadha, Koushik Chakraborty, Manoneeta Chakraborty, P. Chakraborty, Subenoy Chakraborty, Avtar Chand, Harish Chandra, Ramesh Chandra, Suresh Chandra, Philip Charles, Subhamoy Chatterjee, Goutami Chattopadhyay, Surajit Chattopadhyay, Saumyadip Roy Chaudhury, Virander S. Chauhan, Neeraj Chaurasia, Nithaya Chetty, S.M. Chitre, Lakshmi Pradeep Chitta, Devansh Ashish Cholera, Arnab Rai Choudhuri, Aditya Chowdhury, Johannes Coetzee, Stephane Corbel, Dwiti Krushna Das, Ramkrishna Das, Sudipta Das, Soumyaranjan Dash, N.D. Hari Dass, Ujjal Debnath, Walter Del Pozzo, Biprateep Dey, J.S. Dhanya, Sajal Kumar Dhara, P.P. Divakaran, Tsewang Dorjai, Sourav Dutta, Bhola N. Dwivedi, Viswajith E.S., Savithri Ezhikode, Gary J. Ferland, Sharad Gaonkar, Gurudatt Gaur, Partho Ghose, Archisman Ghosh, Aritra Ghosh, Avyarthana Ghosh, Rahul Ghosh, Ritesh Ghosh, Supriyo Ghosh, Sushant G. Ghosh, Tuhin Ghosh, Sushmita Gogoi, Gaurav Goswami, Aruna Govada, Yatee Gupta, Mubashir Hamid, Maria Haney, Sudan Hansraj, K.P. Harikrishnan, M.K. Haris, Siraj Hasan, Dhiraj Kumar Hazra, Gopal Hazra, L.N. Hazra, Sk. Monowar Hossein, John Hughes, Tanvir Hussain, K. Indulekha, Asif Iqbal, Safiqul Islam, Bala Iyer, Rukmini J., Sarah Jabbari, Joe Jacob, Reju Sam John, Varun Jorapur, Chaitanya Joshi, Kanti Jotania, Chinmay Kalaghatgi, Md. Mehedi Kalam, Indrani Karar, Karmeshu, Aurelie Kasprzak, L.N. Katkar, Subhash Kaushik, Rajesh Khindri, Avas Khugaev, Ludwig Klein, Wolfram Kollatschny, Mohan Krishna, Shreyam Krishna, Brajesh Kumar, Dinesh Kumar, Pravir Kumar, Sanjay Kumar, Vishal Kumbhar, Upendra Kumar Singh Kushwaha, Lizette Labuschagne, Sibasish Laha, Alain Lecavelier, Donald Lynden-Bell, Ashish Mahabal, Sunil Maharaj, Nilanjana Mahata, Ashish Malik, Pranshu Mandal, Soma Mandal, Sudip Mandal, Bari Maqbool, Kishore Marathe, Helen Mason, Tabasum Masood, C.P. Masroor, Sujay Vivek Mate, Shibu K. Mathew, Titus Mathew, Rakesh Mazumder, Irom Ablu Meitei, Gajanan Methi, Joanna Mikotajewska, Chandra Kant Mishra, Ishan Mishra, Swagat Saurav Mishra, Vivek Mishra, Wageesh Mishra, Arpita Misra, Rekhesh Mohan, Aditya Sow Mondal, Mrugesh, Arunava Mukherjee, C.S. Narayan Murthy, Pramod G. Musrif, K.C. Nair, Udit Narain, Nancy Narang, K.S.V.S. Narasimhan, Smitha Narayanamurthy, Aravind Natarajan, K.H. Navalgund, Rajesh Nayak, Rahul Nigam, P.K. Nikhil, Joe Philip Ninan, Ashutosh Padelkar, Archana Pai, Supriya Pan, Kumud Pandey, S.K. Pandey, Shivam Pandey, P.N. Pandita, Dishant Pandya, Abhishek Parab, Ajith Parameswaran, Manu Paranjape, Arvind Paranjpye, M.K. Patil, B.C. Paul, Surajit Paul, Devraj Pawar, Pramod Pawar, Guy Perrin, Anirudh Pradhan, Dinesh Ranjan Pradhan, Marina Prokopyeva, G.V. Punyakoti, Purnima, Frederick Raab, D. Radhika, S.V. Raghavan, Farook Rahaman, A.N. Rai, Ashok Kumar Rai, Ashok Raina, K.P. Raju, Chayan Ranjit, Sujata Kundu Ranjit, Vivekananda P. Rao, B.S. Ratanpal, C.D. Ravikumar, Katherine Rawlins, Saibal Ray, Subharthi Ray, B. Eswar Reddy, Alexandre Refregier, David Reitze, Ashim Roy, Prabir Rudra, Sonali Sachdeva, Dipali Burud Sadashiv, Bijan Saha, Subhajit Saha, Sunder B. Sahayanathan, Hemant Saini, Nidhi Sakhala, Parthkumar Sakhiya, Muhammad Saleem, Tanmoy Samanta, Shishir Sankhyayan, Abhik Kumar Sanyal, Kaushik Sarkar, Prakash Sarkar, Subrata Sarker, K. Suryanarayana Sarma, Marek Sarna, Steni Sebastian, S. Seetha, Asoke Kumar Sen, Anand Sengupta, T.R. Seshadri, Vishant Shah, Md. Arif Shaikh, Chandra Shakher, Aishawnnya Sharma, Ranjan Sharma, S.K. Sharma, Sathyakumar Sharma, Tejaswita Sharma, Gargi Shaw, Sanjar Shaymatov, Krishna Shende, Pankaj Sheoran, Yuri Shtanov, G.P. Singh, H.P. Singh, Malay Singh, Nishant Singh, Sunaina Singh, Jaikhomba Singha, Akshat Singhal, Atreyee Sinha, Mark Sirota, Nayem Sk., Helene Sol, Shalu Solomon, Satya Spandana, K. Sriram, L. Sriramkumar, Ockert Strydom, S. Sudhagar, N.S. Suhas, Sharanya Sur, Avinash Surendran, Ramakrushna Swain, V.G. Talawar, Teja Teppala, Sunil Tiwari, Mufaddal Travadi, Kruti Trivedi, Pranjal Trivedi, Paniveni Udayashankar, Adithi Udupa, Fasih Uzzama, Mayank Vahia, D.B. Vaidya, Balaji Venkat, P. Venkatakrishnan, Jai Verdhan, Nishchhal Verma, Naveel Wani, Stanley Whitcomb, Eric Wilcots, Theodore Williams, Arnold Wolfendale, David Wolfendale, Pitayuth Wongjun, and Rahul Yadav.

Visitors
(Expected)

January 2015

P. Abhiramnath, IISER, Bhopal; Sheelu Abraham, St.Thomas College, Kerala; Moumita Aich, University of Kwazulu-Natal, South Africa; Mohd. Shah Alam, Jamia Millia Islamia, Delhi; Deepika Ananda, Harish Chandra Research Institute, Allahabad; Emmanouil Angelakis, Max-Planck Institute, Munich; Arun Kumar Aniyan, AIMS, South Africa; Kalyani Bagri, Pt. Ravishankar Shukla University, Raipur; Avrajit Bandyopadhyay, IIA, Bangalore; Ravinder K. Banyal, IIA, Bangalore; Sudhanshu Barway, SAAO, South Africa; Priya Bharali, Gauahati University, Assam; James Binney, University of Oxford; Dmitry Blinov, University of Crete, Greece; Sunil Chandra, TIFR, Mumbai; Tanuka Chattopadhyay, University of Calcutta, Kolkata; Soumini Chaudhury-Chatterjee, Harish Chandra Research Institute, Allahabad; Laxmikant Chaware, Pt. Ravishankar Shukla University, Raipur; Mousami Das, IIA, Bangalore; Sukanta Das, University of Calcutta, Kolkata; Savithri Ezhikode, St.Thomas College, Kerala; Indu G., IIA, Bangalore; Dimitri Gadotti, European Southern Observatory, Chile; Michelle George, Manipal University, Udipi; Soumavo Ghosh,IISC, Bangalore; Maheswar Gopinathan, ARIES, Nainital; Honey, IIA, Bangalore; Tanvir Hussain, Tezpur University, Assam; Sitha K. Jagan, University of Calicut, Kerala; Naveen Jingade, IISc, Bangalore; Chanda Jog, IIA, Bangalore; Jogadand Sharada Keshav, SRTMU, Nanded; Dhanya Joseph, University of Calicut, Kerala; Karamveer Kaur, RRI, Bangalore; Shashi Kanbur, State University of New York, USA; Preeti Kharb, IIA, Bangalore; Rubinur Khatun, IIA, Bangalore; Parveen Kumar, ARIES, Nainital; Ioannis Liodakis, University of Crete, Greece; Witold Maciejewski, University of Liverpool, United Kingdom; Tabasum Masood, University of Kashmir, Srinagar; Aditya Sow Mondal, Visva-Bharati University, Santiniketan; Anupreeta More, Tokyo University, Japan; Surhud More, Tokyo University, Japan; Sindhu N.,VIT University, Vellore; Biman Nath, RRI, Bangalore; Prasanta Kumar Nayak, IIA, Bangalore; Nagamani P, Osmania University, Hyderabad; Sachin P.C., IIST, Thiruvananthapuram; Vaidehi Paliya, IIA, Bangalore; Virginia Georgia Panopoulou, University of Crete, Greece; Iosif Papadakis, University of Crete, Greece; Patrick Petit-Jean, IAP/Paris Observatory, France, Biswajit Paul, RRI, Bangalore; A. Paventham, Bangalore; Daniel Pfenniger, Geneva Observatory, Switzerland; Manoj Puravankara, TIFR, Mumbai; Swara Ravindranath, Space Telescope and Science Institute, USA; Katherine Rawlins, CBS, Mumbai; Anthony Readhead, Caltech, USA; Arpita Roy, RRI, Bangalore; Aswathy S., University of Calicut, Kerala; Sonali Sachdeva, University of Delhi; Rajib Saha, IISER, Bhopal; Sheetal Kumar Sahu, Pt. Ravishankar Shukla University, Raipur; Kartick Sarkar, RRI, Bangalore; Subrato Sarkar, Visva Bharati University, Santiniketan; Sujan Sengupta, IIA, Bangalore; Neha Sharma, ARIES, Nainital; Passang Lhamu Sherpa, Namchi Government College, Sikkim; K.P. Singh, TIFR, Mumbai; Atreyee Sinha, TIFR, Mumbai; Archana Soam, ARIES, Nainital; Vikram Soni, Jamia Millia Islamia, Delhi; C.S. Stalin, IIA, Bangalore ; Swetha T., Osmania University, Hyderabad; Avinash Surendran, IIA, Bangalore; Kamal Kumar Tanti, University of Technology and Management, Meghalaya; Pablo Reig Torres, University of Crete, Greece; Savin S. Varghese, IISER, Bhopal; Hum Chand Varma, ARIES, Nainital; Mahendra Verma, Pandit Ravishankar Shukla University, Raipur; Naveel Wani, University of Kashmir, Srinagar; and Haiang-Hsu Wang, ASIAA, Taipei.

February 2015

Sudhanshu Barway, SAAO, South Africa; Arnab Rai Choudhuri, IISc, Bangalore; Okengo Geoffrey, University of Nairobi, Kenya; Sumit Kumar, Jamia Millia Islamia, New Delhi; Alain Omont, Institute d' Astrophysique, France; Anjan Ananda Sen, Jamia Millia Islamia, New Delhi; and Prateek Sharma, IISc, Bangalore.

March 2015

Ahmedov Bobomurat, Uzbekistan Academy of Sciences, Uzbekistan; and A. Abdujabbarov, Uzbekistan Academy of Sciences, Uzbekistan.

Know Thy Birds - 8

— Chaitanya Rajarshi

Coppersmith Barbet

Hello friends,

About six years back, I started bird watching with Sparrows, Crows, Koels, Bulbuls, etc. Whenever I came across a new bird, I referred books like Birds of the Indian Sub-continent by Grimmette et. al. and The Book of Indian Birds by Salim Ali. It helped me a lot in building my life list.

On one fine morning, I saw a beautiful bird with crimson forehead and throat. It immediately got my attention and I spent 15 min watching that beauty. I was very curious to know its name. Later I identified it as Coppersmith Barbet (Megalaima haemacephala).

After a few days, I was watching "Earth Matters" on DD National TV channel and in the quiz they showed the photo of this bird and asked for its identification. I was very happy to see it and immediately emailed the answer. I got lucky and announced as a winner in the next episode. I received a certificate and a Earth Matters T-shirt as my prize. This incident made me more fond of bird watching.

What I am trying to say is bird watching makes your life happier. Just take out some time from your busy schedule and look around for birds. By looking at their activities, your mind will be rejuvenated instantaneously.

Tambat (Marathi); Coppersmith/Crimson breasted Barbet
(Photo Courtesy: Umesh Vaghela)

You will be happy to know that Coppersmith Barbets are abundant in IUCAA and Savitribai Phule Pune University Campuses. Just go near to some ficus tree (like Banyan, Peepal) with full of fruits, and listen to its peculiar call "puk puk puk..." just like a coppersmith is striking copper metal (which gave the name to this bird). For identification, you can look for its red forehead and throat, yellow eye-ring and throat patch. It has streaked underside and green upperparts. These Barbets are bigger than sparrows but smaller than Mynas. The male-female are alike.

This "least concerned" bird is found in South East Asia, including Indian sub continent. They make nests by carving cavities in dead tree. They mostly feed on fruits, but sometimes eat insects too. They breed mainly from January to June in India, and both sexes takes part in incubation and feeding.

You will be amazed to know that we cannot succeed in growing the saplings of many trees like Banyan or Peepal through the seeds. However, they are easily germinated through the excrement of birds like Barbet, thus playing an important role in nature conservation.

Friends, how about organizing a bird watching session in our campus. Contact me here: cvr@iucaa.ernet.in.

*** **Wish You A Very Happy Birding** ***

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