



# **Workshop on Statistical Applications on Astronomy and Astrophysics**

**(November 20 to 22, 2019)**

<https://sites.google.com/site/wsaaa2019aus/home>

Organized Jointly By  
Department of Physics, Department of Statistics  
Assam University, Silchar and IUCAA Center for Astronomy Research and  
Development (ICARD), Kolkata



Sponsored by  
Inter-University Center for Astronomy and Astrophysics, Pune  
and Assam University, Silchar

## **About the Workshop**

During the last few years, there has been an increasing interest in research in Astronomy and Astrophysics (AA) in the universities/colleges in the eastern part of India.

The researchers working in this domain collect/generate numerical information concerning their research in AA. Once such data is collected/generated they are to be analysed in a way that the objective of their research can be attained. In order to unearth the facts hidden behind the numerical information collected by the researchers appropriate data analysis is necessary. Thus, proper training in statistical tools along with the use of reliable statistical packages is the need of the hour for the researchers.

Also, in view that several national level projects shall be undertaken in near future, it is necessary to train the young researchers with the ability to analyse their own data. While IUCAA has organized meetings of IUCAA Associates and some regional meets for College/University teachers and young research workers- but the necessity of organizing training programs/workshops to provide training both theoretical and hands on to such researchers is the need of the hour. This can be considered as a special effort to train manpower to ensure that scientists from this region can participate in the national projects.

## **Objectives of the Training Program**

The program shall be operated through some invited talks delivered by eminent scientists from IUCAA and other University and Institutes, addressing the frontline issues of AA. The speakers are expected to focus on the objective of their research on AA, the type of data that were required for their study and the statistical tool to which they resorted to accomplish their research, highlighting the software used.

Hands on training on different statistical software applied for data analysis in AA shall be included.

Presentation of Case Studies by eminent scientists and statisticians working in the field of AA with special emphasis to Data Analysis shall be the highlighted in the workshop.

## **About Assam University**

Assam University came into existence through Assam (Central) University Act, 1989. It was established in 1994, since then the University is steadily becoming an excellent centre of learning. The University has sixteen Schools on major disciplines. There are 40 Departments under these Sixteen Schools and

6 interdisciplinary centers. There are two campuses of Assam University-the main campus at Silchar and the satellite campus at Diphu.

### **About the Department of Physics, Assam University**

The Department of Physics started its functioning in 1996. The Department offers a four – Semester M. Sc. programme (Two years duration) where the students at present can opt for one of the two specializations – i) Astrophysics and ii) Condensed Matter Physics, with laboratory classes. Research areas that are covered at present include – Astrophysics, Particle Physics, Cosmology, Chemical Physics (with application to biomolecules), Atmospheric Physics. The Department possesses a number of sophisticated instruments that includes 16 inch Mead Telescope, 14 inch Celestron Telescope, Astronomical CCD, Photometer, Ellipsometer, FTIR, UV visible spectrophotometer. The Department also has a cluster computing facility.

### **About the Department of Statistics, Assam University**

The department of Statistics, under the Albert Einstein School of Physical Sciences is one of the youngest departments of Assam University, established in 2014. The mission of the department is to bring about development of the researchers in the university and beyond by providing training in data analysis. The department is located in the second floor of Physics building in a scenic set up of the university with airy class rooms. The department has procured licensed version of SPSS 23 and SYSTAT 13. The seminar hall of the department is equipped with uninterrupted projection facility to support software training, public address system, internet connection in the computer used for projection and power plugs provided in each desk for participants to run their laptops during practical training sessions. The department also possesses a dust free air-conditioned computer lab. Alongside its normal academic programs, the department organizes workshops on statistical tools, techniques and software for the benefit of researchers.

### **Who Can Participate and Criteria of Selection**

Registered/enrolled Ph. D students, faculty members of any recognized university/institute of India and abroad or researcher who is working in the field of AA or having plans of taking up research in this area can apply in the workshop by filling up the prescribed registration form and paying appropriate fees. However, interested post graduate students may also apply. 20 outstation participants shall be accommodated.

The applicants shall be short listed based on the requirement of the applicant as shall be evident from the registration form and on first-come-first-serve basis.

The registration shall close once the required number of participants is attained. Thus, participants are requested to apply early and not to wait for the last date. The employed applicants shall get their form forwarded by competent authority.

In case an applicant is selected to the training program he/she shall be informed by email by the Coordinator of the Training Program on or before **6<sup>th</sup> November, 2019**. In case the applicant is not selected his/her fees (submitted amount) shall be returned. A candidate can withdraw from the workshop at any point of time but the registration fee shall be returned only if the withdrawal takes place on or before **2<sup>nd</sup> November, 2019**. No certificate shall be issued to the participant, if he/she remains absent in any of the sessions.

## **Registration Fee**

The registration fee for the participants is as follows:

- (i) Rs. 1500/- for Faculty Members working in Universities, Colleges, Research institutes and for employed Researchers/employed Research Scholars
- (ii) Rs. 1000/- for unemployed full time/part time research scholars
- (iii) Rs 500/- for PG Students

## **Mode of Payment**

Candidate applying for the training program are required to pay the registration fee in Cash/Multicity cheque to The Office of the Head, Department of Statistics, Assam University, Silchar 788011, Assam on or before 31.10.2019 either by person or by post. The Multicity Cheque shall be drawn in favour of **“HEAD DEPT OF STATISTICS”**.

Fees can also be paid by NEFT or RTGS to the following account details, UCO Bank, Assam University Branch, Silchar, Branch Code 002005, IFSC code: UCBA0002005, MICR Code of bank: 788028005 and A/C no. 20050110033890 Name of the A/C holder: HEAD DEPT OF STATISTICS. In case of NEFT/RTGS the applicant has to mention the transaction details in the application form.

The participants shall be provided with workshop kit, refreshments and humble working lunch during the days of the training program.

All selected participants shall bring their laptop during the workshop days.

All communication to the participants shall be made via email.

Interested participants can also get registered electronically using the link:  
<https://sites.google.com/site/wsaaa2019aus/home>

## **Accommodation, Travel Support and Food**

Dormitory accommodation shall be provided to participants on demand. But such accommodation shall be very humble. Breakfast and dinner for participants seeking dormitory accommodation shall be arranged in university Guest House but on payment. No travel support shall be provided to the participants. Participants seeking comfortable accommodation shall be supported by sharing contact details of some budget hotels. The participants shall take up their accommodation related details with those hotels or any other hotel of their choice. Participants shall be provided humble working lunch, tea and snacks during the workshop days.

## **Tentative List of Resource Persons**

- Prof. Aditya Chattopadhyay, University of Calcutta
- Prof. Gaurangadeb Chattopadhyay, University of Calcutta
- Prof. Asis Kumar Chattopadhyay, University of Calcutta
- Prof. Sanjeev Dhurandar from IUCAA, Pune
- Prof. Tanuka Chattopadhyaya, University of Kolkata

## **Venue**

- Seminar Hall, Department of Statistics, Assam University
- Seminar Hall, Department of Physics, Assam University

## **Important Dates**

Last date of Submission of Application Form and Fees: 31st October, 2019

Notification of Selection: On or before 6<sup>th</sup> November, 2019

Workshop Starts: 20<sup>th</sup> November, 2019

Workshop Ends: 22<sup>nd</sup> November, 2019

## **Organizing Committee**

**Chief Patron:** Prof. Dilip C. Nath, Vice Chancellor, Assam University, Silchar

**Patron:** Prof. Asoke Sen, Dean, School of Physical Sciences, Assam University

**Workshop Coordinator:** Prof. Asis Kumar Chattopadhyay, University of Calcutta

**Members of the Organizing Committee:**

Prof. Atri Deshamukhya, Department of Physics, Assam University, Silchar

Dr. Himadri Sekhar Das, Department of Physics, Assam University, Silchar

Dr. Jonali Gogoi, Department of Statistics, Assam University, Silchar

Prof. Dibyojyoti Bhattacharjee, Department of Statistics, Assam University, Silchar (Local Coordinator)

## **Address of Correspondence**

Prof. Dibyojyoti Bhattacharjee, Department of Statistics, Assam University, Silchar-788011, Mobile: 94351 70253, Email ID: [djb.stat@gmail.com](mailto:djb.stat@gmail.com)

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University, Silchar

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## REGISTRATION FORM

1. Name: \_\_\_\_\_

2. Gender: 1. Male ☐ 2. Female ☐

3. Address of Correspondence: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Paste Recent  
Passport Size  
photograph and sign  
across

4. Email: \_\_\_\_\_ 5. Mobile no.

5. Post Graduation in (Subject): \_\_\_\_\_

6. Are you employed? 1. Yes ☐ 2. No ☐

If yes, your designation and institution \_\_\_\_\_

7. Do you have any formal training in Statistics? 1. Yes ☐ 2. No ☐

If Yes, provide details \_\_\_\_\_

8. Amount of fees paid \_\_\_\_\_

9(i) Mode of payment \_\_\_\_\_ (ii) Transaction no. (RTGS/NEFT) \_\_\_\_\_

10. Why do you feel that the training program is useful for you? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The information provided above is true to the best of my knowledge.

Date:

(Signature of the Applicant)

**Forwarding from the Employer (For employed applicants only)**

I forward the application of \_\_\_\_\_ for the Workshop on Statistical Applications on Astrology and Astrophysics from 20 to 22 November, 2019 to be held at Assam University. If selected, he/she shall be allowed to join the program.

(Signature of the Head of the institution/Department, Name, address and seal)