



**Department of Statistics,
Assam University, Silchar-788011**

**Report of the Three Day Workshop on
Statistical Applications on Astronomy and Astrophysics**

November 20-22, 2019

The Department of Statistics, of Assam University in collaboration with the Department of Physics, Assam University and the Inter-University Center for Astronomy and Astrophysics, Pune organized a three day workshop on the theme Statistical Applications on Astronomy and Astrophysics from 20th to 22nd November, 2019 at the Department of Statistics, Assam University. The IUCAA center for Astronomy Research and Development, Kolkata actually collaborated in the event from IUCAA's side.

The program was operated through some invited talks delivered by eminent scientists from IUCAA and other University and Institutes, addressing the frontline issues of Astronomy and Astrophysics. The speakers focused on the objective of their research on Astronomy and Astrophysics, 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.

Display of statistical packages like SPSS and R for data analysis in Astronomy and Astrophysics was included. Presentation of some Case Studies by eminent scientists and statisticians working in the field of Astronomy and Astrophysics with special emphasis to Data Analysis was showcased in the workshop.

The participation in the workshop was open to any 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 Astronomy and Astrophysics or those having plans of taking up research in this area.

As the entire event was funded by IUCAA so no registration fees were charged from the participants. All selected and registered participants were provided with workshop kit, refreshments and humble working lunch during the days of the training program. The out-station participants were provided with accommodation and also their living and travelling expenses were reimbursed.

The profile of the resource persons of the workshop are as below:

- Prof. Dilip C Nath, Vice Chancellor, Assam University
- Prof. Aditya Chattopadhyay, University of Calcutta
- Prof. Gaurangadeb Chattopadhyay, University of Calcutta
- Prof. Atri Deshamukhya, Assam University
- Dr. Himadri Sekhar Das, Assam University
- Prof. Dibyojyoti Bhattacharjee, Assam University
- Dr. Rama Shanker, Assam University
- Prof. Sanjeev Dhurandar from IUCAA, Pune

- Prof. Tanuka Chattopadhyaya, University of Kolkata

The schedule of the program was as follows:

	10:30 to 11	11:15 to 11:45	11:45 to 12:45	12:45 to 1:30	2:15 to 3:15	3:30 to 4:30
20.11.2019	Inaugural	Prof. D C Nath Large sample Tests	Prof. Sanjeev Dhurandhar The statistical detection of gravitational wave signals	Prof. Atri Deshmukhya Bayesian Methods in Cosmology	Dr. Himadri Sekhar Das Observational Astronomy	Dr. Rama Shanker Statistical Applications in astronomy
	10 to 11:15		11:30 to 12:45	12:45 to 1:45	2:15 to 3:30	3:45 to 5
21.11.2019	Prof. Aditya Chattopadhyay Exploratory Data Analysis			Prof. Sanjeev Dhurandhar The statistical detection of gravitational wave signals	Prof. Gaurangadeb Chattopadhyay Regression Analysis	
	10 to 11:15	11:30 to 12:45	1:15 to 2:30	2:45 to 4	4 to 4:30	4: 40 to 5
22.11.2019	Prof. Tanuka Chattopadhyay Astrophysics			Prof. Dibyojyoti Bhattacharjee Multivariate Analysis		Valedictory

The program was attended by 22 participants. The details of the participants along with their Designation and Affiliation are provided in the table below.

Sl. No.	Name	Designation	Affiliation
1	Sonali Borah	PhD Scholar	Assam University
2	Ranchhaigiri Brahma	PhD Scholar	Department of Physics, Assam University, Silchar
3	Tanay Ghosh	PhD Scholar	Assam University, Silchar
4	BHASKAR GOSWAMI	Student	University Of Science and Technology Meghalaya
5	Rajnandan Lahkar	Student	University of Science and Technology, Meghalaya
6	Nayan Moni Kumar	Student	University of Science and Technology, Meghalaya
7	Sarani Chakraborty	Faculty	Maryam Ajmal Women's College of Science and Technology, Hojai, Assam
8	Naznin R. Choudhury	PhD Scholar	Assam University, Silchar

Sl. No.	Name	Designation	Affiliation
9	ABDULLA AHMED	Student	Assam University
10	Rahul Chakraborty	Faculty	Maryam Ajmal Women's College of Science and Technology, Hojai, Assam
11	TAPASH PAUL	Student	Assam University, Silchar
12	KALLOL ROY	Student	Assam University
13	ASHIQUE ZAMAN	PhD Scholar	Assam University
14	Debasish Mondal	PhD Scholar	University Of Calcutta
15	SUPARNA SAU	PhD Scholar	University Of Calcutta
16	ASHOK MONDAL	PhD Scholar	University Of Calcutta
17	Dr.Dipankar Paul	Faculty	R. K. Nagar College
18	Gulafsha Begom Choudhury	PhD Scholar	Assam University Silchar
19	MRINAL DEKA	PhD Scholar	Department of Statistics, Assam University, Silchar-788011
20	Umme Habibah Rahman	PhD Scholar	Dept. of Statistics, Assam University, Silchar
21	Priyanka Talukdar	PhD Scholar	Dept. of Statistics, Assam University, Silchar
22	Sabina Yeasmin	PhD Scholar	Dept. of Physics, Assam University, Silchar

Some glimpses of the workshop are captured below.



Vice Chancellor of the University, Prof. Dilip C. Nath delivering his inaugural address



Dignitaries in the Dias of the Inaugural program of the workshop



Group photo after the valedictory program of the workshop
