UNIVERSITY OF CALCUTTA

FACULTY ACADEMIC PROFILE

Full name: ASIS KUMAR CHATTOPADHYAY

Department: Statistics



Position: Professor of Statistics

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Statistics, 35, Ballygunge Circular Road, Kolkata 700019

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Qualifications:

* Ph.D. University of Calcutta, 1988

* M.Sc. (Statistics) University of Calcutta, 1981, 1st Class.

* B.Sc. (Statistics) Presidency College, University of Calcutta, 1979, 1st Class.

Areas of research interest: Demography, Statistical Computing, Astrostatistics, Multivariate Analysis, Data Mining.

Courses taught: Demography, Statistical Inference, Applied Multivariate Analysis, Optimization

Techniques, C-Programming, Operations Research, Statistical Computing,

Spatial Data Analysis, Statistical Analysis of Big Data.

Previous positions at University of Calcutta:

- 1. Vice Chancellor (interim, 20/10/2022- 19/4/2023)
- 2. Pro-Vice-Chancellor for Academic Affairs (13/6/2019-12.6.2023)
- 3. Professor, Department of Statistics, University of Calcutta (27/7/2006-)
- 4. Reader, Department of Statistics, University of Calcutta (27/7/1998-26/7/2006)
- 5. Senior Lecturer, Department of Statistics, University of Calcutta (1/4/1992- 26/7/1998)
- 6. Lecturer, Department of Statistics, Calcutta University (2/4/1987- 31/3/1992)
- 7. UGC Research Fellow, Department of Statistics, Calcutta University, 1982-1987

Other Visiting Positions:

- 1. Visiting Professor, Institut de Planétologie et d'Astrophysique de Grenoble, France, July 26- August 5, 2019.
- 2. Visiting Scholar, Concordia University, Canada, September 01- December 20, 2018
- 3. Visiting Professor, Institut de Planétologie et d'Astrophysique de Grenoble, France, June 15-July 15, 2012.
- 4. Associate Professor, Indian Statistical Institute (1/8/2007-31/7/2008, on lien)
- 5. Visiting Scientist, Southern Queensland University, Australia, July 1- September 30 2000.

Academic achievements:

Selected as Fellow of West Bengal Academy of Science and Technology (WAST) 2017

Nominated as Statistical Expert in task force committee for Big Data Science on Astrophysics, Govt. of India, 2017

Selected as "Fellow of International Astrostatistics Association", 2016

Elected member of International Statistical Institute, 2016-2024

Selected as Visiting Associate of "Inter University Centre for Astronomy and Astrophysics" (IUCAA) Pune for the periods 2005-2008, 2008-2011, 2011-2014, 2014-2017, 2017-2020, 2020-2023, 2023-2026.

Selected as Sponsored member (supported by UNFPA and French Ministry of foreign affairs) of IUSSP (International Union for the Scientific Study of Population) for the period 2005-2011.

Associate Editor: Journal of Applied Probability and Statistics.

Projects:

- (i) Awarded Indo-French (IFCAM) Project on "Statistical Modelling in Astronomy" during 2015-2017 (PI).
- (ii) Awarded a **Major Research Project** from DST on "Study of galaxy formation through associated bulges, IGIMF and globular clusters." **during 2014-16(Co-PI).**
- (iii) Awarded a Major Research Project from DST on "Dwarf galaxies, Ultra Compact dwarf galaxies and globular clusters" during 2010-13(Co-PI).
- (iv) Started IUCAA Resource Centre sponsored by Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune as Coordinator in the year 2009.

Collaborative Research Works:

Visited University of Southern Queensland, Australia during July 1 – September 30,2000 and jointly done some research work with Dr. Shahjahan Khan, Dept. of Mathematics an Computing, Southern Queensland University, Australia.

As a Visiting Associate of Inter University Centre for Astronomy and Astrophysics, Pune, India interactions are going on with different faculty members.

In the area of Astrostatistics, collaborations are going on with Dr. Didier Fraix Burnet, and visited his Institute Institut de Planétologie et d'Astrophysique de Grenoble, France as Visiting Professor during June 15-July 15, 2012 and July 26- August 5, 2019.

Under Indo-French (IFCAM) project visited Observatoire de Paris, Paris, France during June 24-July 10, 2016 for collaboration with Dr. Frédéric Arenou and Professor Christian Robert.

Visiting Scholar, Department of Mathematics and Statistics, University of Concordia, Montreal Canada, September 01- December 20, 2018

Other Administrative positions:

- Council Member, Indian Statistical Institute (2022-2024)
- Coordinator, IUCAA Center for Astronomy Research and Development (ICARD), Kolkata (2019-)
- Coordinator, Online Post Graduate Course, University of Calcutta under MOOC, 2019
- Course Coordinator, Online Annual Orientation Course on Mathematics and Statistics, University of Calcutta (National Resource Centre) ,2018
- Coordinator, DSA-Phase II, Department of Statistics, CU, 2015-2020
- Coordinator: M.Phil Course in Computer Applications of Statistics (2006-2010)
- Head: Department of Statistics, Calcutta University, (2001-2003, 2009-2011)
- Coordinator, IUCAA Resource and Data Centre, Kolkata (2009-2019)
- Coordinator: M.Phil Course in Statistics and Computer Applications (2012-2017)
- President, Operational Research Society of India, 2015-2016.

Ph.D. Supervision:

Degree received: 7 Ongoing: 3

Number of published research papers: 101

Number of books: 5

Total Citations (Google Scholar): 860 (May 20, 2024)

h-index: 17 (May 20, 2024)

i10-index: 24 (May 20, 2024)

LIST OF SOME IMPORTANT PUBLICATIONS (2024-2006)

- Investigation of the effect of bars on the properties of spiral galaxies: a multivariate statistical analysis, Prasenjit Banerjee, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, Communications in Statistics- Simulation and Computation, 2024, 53(3), 1216-1246
- A new approach to Astronomical data analysis based on multiple variables, , Prasenjit Banerjee, Asis Kumar Chattopadhyay and Soumita Modak , Advances in Astronomy, 2023, Article ID 8682054.

- Comparison among different clustering and classification techniques: Astronomical datadependent study, Prasenjit Banerjee, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, New Astronomy, 2023, 100.
- 4. Migration through aspiration: A model based investigation, Ardhendu Banerjee, Arindam Gupta and Asis Kumar Chattopadhyay, Demography India, 2022, 51(2), 111-124.
- Clustering of eclipsing binary light curves through functional Principal Component Analysis,
 Soumita Modak, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, Astrophysics and
 Space Science, 367 (Article id 19),2022.
- Exploration about the origin of galactic and extragalactic star clusters through simulated H-R diagram, Tanuka Chattopadhyay, Sreerup Mondal, Suman Paul, Subhopip Maji and Asis Kumar Chattopadhyay, Astrophysical Journal, 2021, 911(1), 22-43.
- 7. Model based clustering for Cylindrical Data, Ashis Sengupta, Moumita Roy, **Asis Kumar** Chattopadhyay, **Advances in Statistics-Theory and Methods (Edited Volume)**, **2021**, 347-363, Springer.
- 8. Some Computational Issues Related to Common Clustering Techniques, **Asis Kumar** Chattopadhyay, Statistics and Applications, 2020, 18(2), 249-261.
- 9. Unsupervised classification of eclipsing binary light curves through k-medoids clustering, Soumita Modak, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, Journal of Applied Statistics, 2020, 47(2), 376-392.
- 10. Impact of adult mosquito control on dengue prevalence in a multi-patch setting: A case study in Kolkata (2014-15), Abhishek Senapati, Tridip Sardar, Krishnendra Sankar Ganguly, Kriishna Sankar Ganguly, Asis Kumar Chattopadhyay and Joydev Chattopadhyay, **Journal of Theoretical Biology**, **2019**, **478**, **139-152**.
- 11. Clustering of Gamma-Ray bursts through Kernel Principal Component Analysis, Soumita Modak, Asis Kumar Chattopadhyay and Tanuka Chattopadhyay, Communications in Statistics- Simulation and Computation, 2018, 47(4),1088-1102.
- 12. Spatial clustering of Dengue Fever: A Baseline study in the City of Calcutta, Krishna Sankar Ganguly, Krishnendra Sankar Ganguly, **Asis Kumar Chattopadhyay**, Ambar Dutta, Tapan Kumar Mukherjee, Debasis Biswas, **International Journal of Health Care and Medical Scince, 2018**, 10(4),170-187.
- 13. Analytical Study of a Dual Pointer Based Strategy for Location Update Using Node B Sojourn Time in UMTS Networks, Samir K. Sadhukhan, Chayanika Bose, Debashis Saha and **Asis**

- Kumar Chattopadhyay, International Journal of Business Data Communications and Networking, 2018, 14(2), 44-70.
- 14. Two phase formation of massive elliptical galaxies: study through cross correlation including spatial effect, Soumita Modak, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay Astrophysics and Space Science, 2017, 362(11) article id.206.
- 15. Incomplete Data in Astrostatistics, Asis Kumar Chattopadhyay, Wiley StatsRef: Statistics Reference online, 2017.
- 16. Evolution of Initial Mass function in Young Massive Star Clusters, Abisa Sinha, Tanuka Chattopadhyay and **Asis Kumar Chattopadhyay**, **Rashi,2017**, 2(1), 18-25.
- 17. Classification under non-Gaussian set up: An Astrostatistical problem, Tuli De, Rahul Bhattacharya and **Asis Kumar Chattopadhyay**, **Journal of Applied Probability and Statistics**, **2016**, 11(2), 29-47.
- 18. Study on temporal effects on Urban Malaria incidences, Krishnendra S. Ganguly, Soumita Modak, Krishna S. Ganguly and Asis Kumar Chattopadhyay, International Journal of Statistics in Medical Research, 2016, 5, 120-132.
- 19. Analysis of partial ordinal longitudinal data, Kalyan Das, Surupa Roy aand **Asis Kumar Chattopadhyay, Journal of Statistical Research, 2016,**48-50(1),15-33.
- 20. Clustering large number of extragalactic spectra of galaxies and quasars through canopies Tuli De, Didier Fraix Burnet and **Asis Kumar Chattopadhyay, Communications in Statistics, theory and methods**, **2016**, 45(9), 2638-2653.
- 21. Influence of binary fraction on the fragmentation of young massive clusters?a Monte Carlo simulation, Tanuka Chattopadhyay, Abisa Sinha, Asis Kumar Chattopadhyay, Astrophysics and Space Science, 2016, 361,120-133.
- 22. AstroStat- A VO tool for statistical analysis, A.K. Kembhavi, A.A. Mahabal, T. Kale, S. Jagade, A. Vibhute, P. Garg, K. Vaghmare, S. Navelkar, T. Agrawal, A. Chattopadhyay, D. Nandrekar, M. Shaikh, , Astronomy and Computing, 2015, 11(B), 126-137.
- 23. Multivariate Approaches to Classification in Extragalactic Astronomy, Didier Fraix-Burnet, Marc Thuillard and Asis Kumar. Chattopadhyay, Frontiers in Astronomy and Space Science, 2015, 2.
- 24. Study of the nature of dark matter in halos of dwarf galaxies, Pradip Karmakar, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, Astrophysics Space Science, 2015, 358, 46.

- Cosmic history of the integrated galactic stellar Initial Mass Function: A Simulation Study, Tanuka Chattopadhyay, Tuli De, Bharat Warlu and Asis Kumar Chattopadhyay, Astrophysical Journal, 2015, 808, 24-38.
- 26. Independent Component Analysis and Clustering for Pollution Data,
 Asis Kumar Chattopadhyay, Saptarshi Mondal and Atanu Biswas, Environmental and
 Ecological Statistics, 2015, 22(1), 33-43.
- 27. Use of cross correlation function to study formation mechanism of massive elliptical galaxies, Tuli De, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, Publications of the Astronomical Society of Australia, 2014, 31, 47-54.
- 28. Outlier detection through Independent Components for non Gaussian data, Asis Kumar Chattopadhyay and Saptarshi Mondal, Journal of the Indian Society of Agricultural Statistics, 2014, 68(2), 39-54.
- 29. Performance Comparison of Clustering Techniques on the basis of galaxy data, Tuli De, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, Calcutta Statistical Association Bulletin, 2013, 65 (257-258).
- Probability distributions of number of children and maternal age at various order births using age-specific fertility rates by birth order, Samba Siva Rao Pasupuleti and Asis Kumar Chattopadhyay, Sankhy series B,2013 75(2), 374-408
- 31. Independent Component Analysis for the objective classification of globular clusters of the galaxy NGC 5128 **Asis Kumar Chattopadhyay**, Saptarshi Mondal and Tanuka Chattopadhya **Computational Statistics and Data Analysis**, **2013**, 57,17-32.
- 32. A six-parameter space to describe galaxy diversification D. Fraix-Burnet, T. Chattopadhyay, Asis. Kr. Chattopadhyay, E. Davoust, and M. Thuillard Astronomy and Astrophysics, 2012,545, A80.
- 33. Uncovering the formation of ultracompact dwarf galaxies by multivariate statistical analysis. Tanuka Chattopadhyay, Margarita Sharina, Emmanuel Davoust, Tuli De and Asis Kumar Chattopadhyay Astrophysical Journal, 2012, 750, 91
- 34. Independent Component Analysis for dimension reduction classification: Hough Transform and CASH algorithm. Asis Kr Chattopadhyay, Tanuka Chattopadhyay, Tuli De and Saptarshi Mondal. Astrostatistical Challenges for New Astronomy, Springer Series in Astrostatistics, 2012, Editor Joseph Hilbe.
- 35. Exploring New Models for Population Prediction in detecting Demographic Phase Change for Sparse Census Data, Arindam Gupta ,Sabyasachi Bhattacharya and Asis Kr Chattopadhyay, Communications in Statistics, Theory and Methods. 2012, 41, 1171.

- 36. Modeling of the Initial Mass Function using the Metropolis Hastings Algorithm Tanuka Chattopadhyay, **Asis Kr Chattopadhyay** and Abisa Sinha, **Astrophysical Journal 2011**, 736, 152.
- 37. **Structures in the fundamental plane of early-type galaxies.**Didier Fraix-Burnet, M.Dogue, T Chattopadhyay, **A.K.Chattopadhyay** and Emmanuel Davoust.**Monthly. Notices. Royal Astro. Soc., 2010**,407,2207.
- 38. Study of NGC5128 globular clusters under multivariate statistical paradigm.

 Asis Kumar Chattopadhyay, Tanuka Chattopadhyay, Saptarshi Mondal, Margarita Sharina and Emmanuel Davoust, Astrophysical Journal, 2009, 705, 1533.
- 39. Horizontal Branch Morphology of Globular Clusters: A Multivariate Statistical Analysis Jogesh Babu, Tanuka Chattopadhyay, A.K.Chattopadhyay and Saptarshi Mondal Astrophysical Journal, 2009, 700, 1768.
- 40. Effect of Migration on Population growth under dynamical system Sabyasachi Bhattacharya, Arindam Gupta and Asis Kumar Chattopadhyay Journal of Applied Probability and Statistics, 2009,4(2), 239.
- 41. Classification and Clustering techniques with application in Astrophysics
 Asis Kumar Chattopadhyay ,Multivariate Statistical Methods, Theory and Applications
 (edited by A. Sengupta),2008, 202-215, Macmillan India Ltd
- 42. Globular Clusters in the Milky Way and Dwarf Galaxies A Distribution-Free Statistical Comparison, Saptarshi Mondal, Asis Kumar Chattopadhyay and Tanuka Chattopadhyaym, Astrophysical Journal, 2008, 683, 172
- 43. Statistical evidences of three classes of Gamma Ray Bursts
 Tanuka Chattopadhyay, Ranjeev Misra, Asis Kumar Chattopadhyay and Malay Naskar
 Astrophysical Journal, 2007, 667, 1017.
- 44. A Stochastic Manpower Planning model under varying class sizes Asis Kumar Chattopadhyay and Arindam Gupta, Annals of Operations Research, 2007,155(1), pp 41
- 45. Globular Clusters of LOCAL Group Statistical Analysis, Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, Astronomy and Astrophysics, 2007, 472, 131.
- 46. Objective Classification of Spiral Galaxies having Extended Rotation Curves beyond Optical Radius. Tanuka Chattopadhyay and Asis Kumar Chattopadhyay, Astronomical Journal, 2006, 131, 2452.

47. Study on Diffusion of Rumours through Epidemic Models under non identical set up Asis Kumar Chattopadhyay and Arindam Gupta Cal. Stat. Assoc.Bull. 2006, 58(231-232),263

BOOKS:

- Computer Applications of Mathematics and Statistics
 Asis Kumar Chattopadhyay and Tanuka Chattopadhyay: Asian Books Pvt Ltd. 2005
- 2. Demography: Techniques and Analysis
 Asis Kumar Chattopadhyay and Anuj Saha, Viva Books Private Limited, 2012
- 3. Statistical Methods for Astronomical Data Analysis Asis Kumar Chattopadhyay and Tanuka Chattopadhyay, Springer Series in Astrostatistics, New York, 2014 (Selected under the category of "Outstanding publication in Astrostatistics-2016" by International Astrostatistics Association)
- **4.** Statistics and its Applications, Proceedings Volume of Platinum Jubilee conference, Department of Statistics, Calcutta University, , Springer Nature Singapore Pte Ltd 2018, Editors: **Asis Kumar Chattopadhyay** and Gaurangadeb Chattopadhyay.
- **5.** Statistical Methods in Social Science Research, S.P.Mukherjee, Bikas K Sinha and **Asis Kumar Chattopadhyay**, Springer Nature Singapore Pte Ltd, 2018.

Conference / Seminar / workshop 2000-2024

- 1. Fourth International Triennial Calcutta Symposium, December 26-28, 2000. : Organized jointly by the Department of Statistics, Calcutta University and Calcutta statistical association.
- 2. International Conference on Recent Developments in Statistics and Probability and their Applications, Dec 30, 2000 Jan 2, 2001: Organized jointly by International Indian Statistical Association and other Indian Statistical Organizations at Delhi.
- 3. Discussion meeting on recent Trends in Statistic: Methodologies and applications, March 2-3, 2001, Depends of Statistics, Calcutta University.
- 4. National seminar on Stochastic Modelling and its Applications, March 23-24, 2001 : Organized by the Department of Statistics, Calcutta University.
- 5. Seminar on Reliability Theory and its applications, June 21-23, 2001: Organized by the Department of Statistics, University of Pune. Poona.

- 6. National Conference on Statistical Computing, November 26-28, 2002: Organized by the Department of Statistics and Computer applications, T.M. Bhagalpur University, Bhagalpur.
- 7. Xth International Conference on Statistics, Combinatorics and Related areas, December 21-23, 2002: Organized by the University of Allahabad, India and University of South alabama, USA.
- 8. International Bayesian Workshop/Conference: January 6-8, 2003 at the Indian Statistical Institute, Kolkata.
- 9. Workshop on Undocumented Migration from Bangladesh to West Bengal: January 10, 2003 at the Indian statistical Institute, Calcutta.
- 10. National Seminar on Statistics in Industry, Business and Finance: March 21-22, 2003 at the Department of Statistics, Calcutta University.
- 11. Professor K.M. Hossain Memorial International Seminar-cum-Workshop On Recent advances in exploratory data analysis: Models, Methods and Computer Algorithm: October 14-16, 2003 at the University of Rajshahi, Bangladesh.
- 12. IMS sponsored Mini-Meeting on Statistics in Social Science and Agricultural Research: December 20-21, 2003 at Santiniketan, India.
- 13. Fifth International Calcutta Symposium on Probability and Statistics : December 28-31, 2003 at the Department of Statistics, Calcutta University
- 14. International conference on Future of Statistical Theory, Practice and Education: December 29, 2004 January 01, 2005 at the Indian School of Business, Hyderabad.
- 15. Training Course on Computer Application and Data Processing in Social Science Research: March 24-28 2005 at the Department of Statistics, Manipur University.
- 16. Workshop on Astrostatistics: December 21-23, 2005 jointly organized by Inter University Centre for Astronomy and Astrophysics (IUCAA) Pune and Department of Statistics, Calcutta University at Kolkata.
- 17. Workshop on Multivariate Statistical Methods with Emerging Applications: December 23-27,2006, Applied Statistics Unit, Indian Statistical Institute, Kolkata.
- 18. Sixth International Calcutta Symposium on Probability and Statistics: December 29-31, 2006 at the Department of Statistics, Calcutta University.
- 19. Instructional Workshop on Social Network Analysis: February 9-13, 2007 at the Indian Statistical Intitute, Kolkata.
- 20. Conference on Social Network Analysis: February 14-15, 2007 at the Indian Statistical Institute, Kolkata.
- 21. International Conference on Present Practices and Future Trends in Quality and Reliability: January 22-25, 2008, Indian Statistical Institute, Kolkata.
- 22. Workshop on Statistical Challenges in Demography, July 8, 2008, Population Studies Unit, Indian Statistical Institute, Kolkata.
- 23. 18th Triennial Conference of the International Federation of Operations Research Societies, July 13-18, 2008 held at Sandton, South Africa.
- 24. Workshop on Machine learning methods in Astronomy, January 19-23, 2009 held at Mar Althanasios College for Advanced Studies (macfast.org), Tiruvalla, Cochin
- 25. Refresher Course on Computer Applications in Statistics (Winter School), March, 9-31,2009 ,Applied Statistics Unit, Indian Statistical Institute, Calcutta.

- 26. Workshop on Statistical Computing with R, March 23,2009, Department of Statistics, North 24-Parganas State University, Barasat, W.B.
- 27. IndoMS International Conference on Mathematics and its Applications (IICMA 2009), October 12-13, 2009, Yogyakarta, Indonesia.
- 28. National Seminar on Emerging Trends and Challenges in Operations Research, November 17-18, 2009, Department of Applied Mathematics, Calcutta University.
- 29. Tenth Islamic Countries Conference on Statistical Sciences (ICCS-X), December 20-23, 2009 held at American University in Egypt, Cairo, Egypt.
- 30. Workshop on Astrophysics and Cosmology, January 13-14, 2010, Department of Applied Mathematics, Calcutta University.
- 31. XII Annual Conference of Society of Statistics, Computer and Applications, February 42-26, 2010, Department of Statistics, Visva-Bharati.
- 32. Refresher Course on Computer Applications in Statistics (Winter School), March, 8-26,2010 ,Applied Statistics Unit, Indian Statistical Institute, Calcutta.
- 33. Advanced Workshop on Astronomy: Observations, Theory and Interpretation, April 5-9, 2010, Department of Physics, North Bengal University
- 34. Seminar on Recent Advances in Applied Statistics, July 28, 2010, Department of Statistics, West Bengal State Univ.
- 35. Workshop on Advanced Statistical techniques for Astronomy, October 04-08, 2010, Inter University Centre for Astronomy and Astrophysics, Pune.
- 36. Workshop on Data Analytic Techniques for Astronomy, November 23-25, 2010, Department of Statistics, Burdwan University.
- 37. National Seminar on Statistics and Informatics for massive Data Sets, December 3-5, 2010, Department of Statistics, Kalyani University.
- 38. International Conference on Frontiers in Applied Mathematics and its Computational aspects, March 15-17,2011, Department of Applied Mathematics, Calcutta University
- 39. Series of lectures on Statistical methods and applications in astrophysics, March 27-April 2,2011, Departments of Physics, Mathematics and Management, Assam University, Silchar.
- 40. National Workshop on Biostatistics: Applications of Computational Statistics in Medicine and Biology (ACSMB-2011), September 8-10, 2011, School of Medical Science and Technology, Indian Institute of Technology, Kharagpur, W.B.
- 41. Micro Seminar on Nonlinear Phenomena, September 23, 2011, Department of Mathematics, Bethune College, Kolkata.
- 42. UGC sponsored seminar on Applications of Statistical tools and techniques in multidisciplinary fields, November 25-26, 2011, Department of Statistics, Lady Brabourne College, Kolkata.
- 43. Workshop on Data Analysis: X-Ray Pulsars and Compact objects, December 1-3,2011, IUCAA Resource Centre, Department of Physics, North Bengal University, Siliguri, West Bengal.
- 44. National Conference on Application of Statistics in Life Science and Engineering, December 10-11, 2011, Rathindra Krishi Vigyan Kendra, Institute of Agriculture, Visva-Bharati, Shantiniketan, West Bengal.
- 45. International conference on Contemporary issues and Applications of Statistics, January 2-4, 2012, Indian Statistical Institute, Kolkata.
- 46. 22nd Annual Conference of The International Environmetrics Society (TIES), January 3-6, 2012, CRRAO AMISCS, University of Hyderabad, Hyderabad.
- 47. 99th Annual Conference of the Indian Science Congress Association, January 3-7,2012, Kalinga Institute of Industrial Technology, Bhubaneswar, Odisha.

- 48. Introductory workshop on Astronomy and Astrophysics: Theory and Practice, February 18,2012, Department of Applied Mathematics, Indian School of Mines, Dhanbad.
- 49. National Seminar on Applications of Statistics in Industry and Planning, February 25-27, 2012, Department of Statistics, Visva-Bharati.
- 50. Dimension reduction and identification of data clusters under Gaussian and non Gaussian set up June 21, 2012, Department of Applied Mathematics and Computer Scieence, Jean Kuntzmann Laboratory, Domain University, Grenoble, France
- 51. Series of lectures on Statistical Inference and Multivariate Analysis, June 22,25,27, 2012, Department of Physics ,IPAG, Domaine University, Grenoble, France.
- 52. Workshop on Techniques of Analysis of Demographic and Health Statistics and Application of Computer Software, October 10-12, 2012, Indian Statistical Institute, Kolkata.
- 53. Recent trends in Interdisciplinary Research and Astrophysics-Space Science, November 3-4, 2012, Department of Physics, M.B. Govt. P.G. College, Haldwani, Nainital
- 54. International Conference on Recent Advances in Mathematical Statistics and its Applications in Applied Sciences, December 31,2012-January 2,2013, Department of Statistics, Guahati University.
- 55. Seminar on Multivariate Analysis and its Applications, January 2, 2013, Presidency University, Kolkata.
- 56. Workshop on Environmental Statistics, March 4-6,2013, Statistical and Applied Mathematical Science Institute (SAMSI), Research Triangle Park, USA
- 57. Workshop on Analysis of Astronomical Data, Dec 16-17, 2013, Department of Physics, North Bengal University.
- 58. IUCAA Science and Astronomy Camp with night sky observation, Jan 10-11, 2014, Birbhum Institute of Engineering and Technology, WB.
- 59. Training on Basic Demographic Techniques, Jan 13-24,2014, Sampling and Official Statistics Unit, Indian Statistical Institute, Kolkata.
- 60. National Conference on Inference for Stochastic Process-Recent trends and ideas, February 21-22,2014, Institute of Agriculture, Visva Bharati.
- 61. Space Marathon, April 10, 2014, Indian Institute of Technology, Kharagpur.
- 62. Workshop on Observational Aspects of Astrophysics and Cosmology, November 3-4, 2014, Department of Physics, Visva Bharati.
- 63. Census data dissemination workshop, December 19, 2014, Indian Statistical Institute, Kolkata (sponsored by UNFPA).
- 64. Recent Trends in Mathematical and Computational Sciences (NCRTMCS-2015), January 3-4, 2015, T.M.Bhagalpur University.
- 65. National Conference on Emerging trends in Statistical Research: issues and challenges, February 16-17, 2015, Pondicherry University, Pondicherry.
- 66. SAMSI VI-MSS Workshop on Environmental Statistics, March 2-4, 2015, Indian Statistical Institute, Kolkata
- 67. 60th ISI World Statistics Congress, July 26-31,2015, Rio de Janeiro, Brazil.
- 68. Ph.D. Course work for research scholars, September 22-Otober 7,2015, Department of Chemical Technology, University of Calcutta.
- 69. Workshop on Fundamentals of Biomedical Research Methods, October 7-9, 2015, Regional Occupational Health Centre (Eastern), Salt Lake City, Kolkata.
- 70. 2nd Biennial Conference of Jharkhand Society of Mathematical Sciences, Mahalanobis memorial lecture on Multivariate Analysis, November 21-23,2015.
- 71. Workshop on Statistical Techniques used in Research, Department of Statistics, Burdwan University, February 16-19, 2016
- 72. Faculty Development Programme for Professionals and Academicians on "Business and Financial Market Analysis", The Institute of Cost Accountants of India (ICAI), February 22 28, 2016.

- 73. Faculty Development Programme on Pedagogy and Research, RCC Institute of Information and Technology, Kolkata, August 1-5, 2016.
- 74. UGC sponsored Two-day National Seminar on Use of Statistics in the Analysis of Socio-Economic Development: Contemporary issues in India, Departments of Economics and Statistics, Midnapore College, West Bengal, November 7-8, 2016.
- 75. 49th ORSI Conference, Birla Institute of Management and Technology, Greater Noida, Plenary Talk, December 12-14, 2016.
- 76. 2nd Workshop on Statistical Techniques used in Research, Department of Statistics, University of Burdwan, Feb 21-24,2017.
- 77. UGC sponsored refresher course in mathematical sciences, Department of Pure Mathematics, University of Calcutta, March 8-29, 2017.
- 78. 5th IIMA International conference on Advanced Data Analysis, Business Analytics and Intelligence, Key note Address, Indian Institute of Management, Ahmedabad, April 8-9, 2017.
- 79. Series of lectures on Clustering & Dimension Reduction- ways to big data analysis, Department of Computer Science & Engineering, Jadavpur University, 22nd 29th May, 2017.
- 80. National Workshop cum Training Programme on Statistical Tools for Research Data Analysis, Department of Agricultural Statistics, Bidhan Chandra Krishi Viswavidyalaya, West Bengal, May 29-June 09, 2017.
- 81. Faculty Development Program at Army Institute of Management, Kolkata, 24 Jul 29 Jul, 31 Jul, 01 Aug, 2017.
- 82. International Conference on New paradigms in Statistics for Scientific and Industrial Research, Central Glass & Ceramic Research Institute, Kolkata, January 4-6, 2018.
- 83. Three day seminar on "Statistical Issues in Music and Home Science Researches", Department of Home Science, University of Calcutta, February 6-8, 2018.
- 84. International Conference on "Small area estimation and other topics of current interest in surveys, official statistics and general statistics", East China Normal University (ECNU), Shanghai, China, June 16-18, 2018.
- **85.** Training on Life tables and Population Projection for Bhutanese Officers, Indian Statistical Institute, Kolkata, July 2-13, 2018.
- 86. Astrostatistics- Astrophysics through Statistics, Carleton University, Canada, November 9,2018
- 87. Series of Talks on Astrostatistics, Department of Mathematics and Statistics, Concordia University, Canada, October 5,19, November 23,2018.
- 88. Independent Component Analysis and robust clustering related to Pollution and Astronomical data, Department of Mathematics and Statistics, Concordia University, Canada, November 26, 2018.
- 89. Workshop on Data Analysis and Machine Learning, Organized by Indian Institute of Science, Education and Research, Tirupati and Inter University Center for Astronomy and Astrophysics, Pune, IISER Tirupati, May 24-28, 2019.
- 90. 62nd ISI World Statistics Congress, 18 23 August 2019 in Kuala Lumpur, Malaysia.
- 91. Professor Aditya Chatterjee Memorial Lecture, Organized by Calcutta Statistical Association, Department of Statistics, University of Calcutta, December 4, 2023.
- 92. Workshop on Statistical Techniques used in research, Keynote address, Organized by the Department of Statistics, University of Burdwan, West Bengal, February 6-22, 2024.
- **93.** Online Lecture Series for Propagation of Statistics Education and Research, Organized by Calcutta Statistical Association, May 18,2024