

PRESIDENCY UNIVERSITY



NEWSLETTER

NOVEMBER, 2024

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EVENTS AT SCHOOL OF ASTROPHYSICS

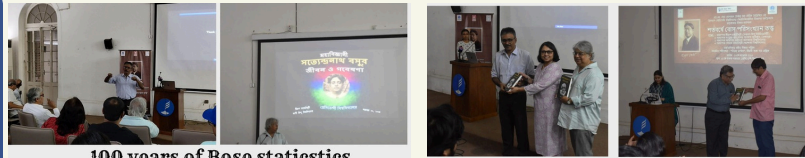
COLLOQUIUM AT THE SCHOOL OF ASTROPHYSICS

On November 13th, 2024, Dr. Trisha Bhowmik from Universidad Diego Portales, Chile, delivered an engaging talk titled "The Ophiuchus Disc Survey Employing ALMA (ODISEA): A Study of Planet-Forming Disks". Held in Astrophysics Classroom I, her presentation highlighted the ODISEA project's findings, including the discovery of 100 protoplanetary disks in the Ophiuchus Molecular Cloud using ALMA, insights into disk structure, and factors influencing planet formation. Dr. Bhowmik's research enhances our understanding of planetary system diversity and Earth-like planet formation, providing a fresh perspective on the early stages of planet-forming environments.



শতবর্ষে বোস পরিসংখ্যান তত্ত্ব (100 YEARS OF BOSE STATISTICS)

On November 20, 2024, a special seminar was held at A.K. Basak Hall, Presidency University, to celebrate the centenary of Bose Statistics, honoring the groundbreaking contribution of Bengali physicist Satyendra Nath Bose to quantum physics. In 1924, Bose's revolutionary paper on Planck's radiation law, derived without classical physics, sparked a paradigm shift. Translated and expanded by Albert Einstein, it led to the prediction of Bose-Einstein Condensation. This event commemorated Bose's remarkable legacy.



100 years of Bose statistics



WEEKLY SEMINAR

The weekly seminar at the School of Astrophysics was organized on 27th November, 2024. Prof. Daisuke Nagai, Yale University was invited to be the main speaker.

Prof. Daisuke Nagai delivered a talk on "Cosmology in the Era of Multi-Wavelength Surveys," exploring the golden age of astronomical surveys like Euclid, eROSITA, Rubin-LSST, and CMB-S4. He discussed the immense scientific opportunities and challenges presented by big data, emphasizing advances in computational modeling and the transformative roles of artificial intelligence and machine learning in understanding cosmology and galaxy formation.



EVENTS AT DEPARTMENT OF ECONOMICS



ANTI RAGGING SENSITIZATION EVENT "EMPOWER NOT OVERPOWER"

On November 20th, 2024, Oikos, the Economics Society of Presidency University, organized an Anti-Ragging Sensitization Programme in the Economics Lecture Theatre. The event aimed to raise awareness about the consequences of ragging while promoting inclusivity and respect. Activities included a poster presentation highlighting psychological, social, and legal impacts, an essay competition proposing anti-ragging measures, and speeches and poetry recitations offering personal perspectives. A powerful short film on ragging's effects further emphasized vigilance and compassion. Active participation from students and faculty underscored a collective commitment to creating a safe, respectful campus environment.

INTERACTIVE SESSION WITH DIRECTOR OF GRADUATE STUDIES, VIRGINIA TECH UNIVERSITY

Presidency University has established a partnership with Virginia Tech University to offer a coordinated 2-Year M.A. Degree Program in Economics from August 2025. Dr. Niloy Bose (Director, Graduate Studies) of Virginia Tech University came over to Presidency University on 26th November 2024 when the MoU was exchanged. He met the aspiring students in an interactive session.



EVENTS AT DEPARTMENT OF LIFE SCIENCES



DEPARTMENTAL COLLOQUIUM (ALUMNI TALK)

On November 27, 2024, DLS alumnus Mr. Gaurab Ghosh, a Senior Research Fellow at IISER-Kolkata, delivered an insightful lecture at the DLS Zoology Lecture Theatre-1. Titled "Tale of the Fate Transition from Epithelia to Non-Professional Phagocytes: Study from *Drosophila* Oogenesis," the talk explored how epithelial cells acquire non-professional phagocytic fate.

Using the *Drosophila* ovary model, Mr. Ghosh demonstrated that the Ecdysone pathway aids in removing nurse cells (NCs) by anterior follicle epithelial cells during late oogenesis. His findings highlighted the role of Ecdysone signaling in modulating phagocytic receptors Croquemort (Crq) and Draper (Drpr). Live imaging and genetic analyses revealed that 4-5 epithelial cells collectively clear NCs in a process requiring engulfment prior to clearance. This study sheds light on mechanisms critical to tissue homeostasis and organ sculpting.



DEPARTMENTAL COLLOQUIUM

Dr. Robert John Chandran, Associate Professor in Biological Sciences at IISER-Kolkata, delivered a lecture on November 20, 2024, at DLS Zoology Lecture Theatre-1. His talk, titled "The Determinants of Grassland-Woodland Mosaics in the Terai-Duar Savanna and Grassland Ecosystems of the Indian Subcontinent," explored the ecological dynamics of these biodiversity-rich landscapes.

Grasslands, covering 40% of Earth's land surface, are critical for carbon sequestration, hydrological cycling, and habitat conservation. Dr. Chandran highlighted the roles of fire, herbivory, and hydrology in shaping grassland-woodland mosaics, focusing on the vegetation diversity and dynamics of the Terai-Duar Savanna at the Himalayan foothills. The lecture provided valuable insights into the ecological and environmental importance of these ecosystems.

DEPARTMENT OF LIFE SCIENCES

Presidency University Kolkata

Colloquium Series

20th November 2024
Time: 2.30 pm
Venue: PLT1



Dr. Robert John Chandran
Associate Professor
Department of Biological Sciences
IISER Kolkata

The determinants of grassland-woodland mosaics in the Terai-Duar Savanna and Grassland ecosystems of the Indian subcontinent



EVENTS AT DEPARTMENT OF MATHEMATICS

MATHEMATICS FOR DATA SCIENCE: GRADIENT DESCENT

The Department of Mathematics, Presidency University, Kolkata, organized a special online lecture titled "Mathematics for Data Science: Gradient Descent" on November 8th, 2024, at 6:00 PM via Google Meet. The lecture attracted over 300 participants, including students from IIT Bombay, IIT Patna, and BHU, PhD scholars from IIT Delhi and ISI Kolkata, and professionals from diverse fields. Professor Avishek Adhikari welcomed the audience and introduced the esteemed speakers, Mr. Krishanu Bera (Software Delivery Manager, IQVIA) and Mr. Biswajit Pal (Director of Data Science, Kenvue), both alumni of the 2004 batch of Presidency University's Department of Mathematics. The lecture provided a comprehensive understanding of mathematical concepts behind data science, AI, and ML, focusing on gradient descent's role in training deep learning models for tasks like outcome prediction and handwritten letter recognition. An engaging Q&A session followed, enriching participants' knowledge of real-world AI applications.

Department of Mathematics
Presidency University
Organises a special online lecture on
"Mathematics for Data Science: Gradient Descent"

Date: 8th November, 2024
Time: 6:00 PM-7:00 PM
Meeting link: meet.google.com/ymf-vvwu-muy
All are invited

Topics to be discussed
1. Context of Gradient descent
2. Introduction to Gradient descent
3. Types of Gradient descent

Speakers:
Mr. Krishanu Bera
Software Delivery Manager, IQVIA
(Maths Alumnus, Batch: 2004)

Mr. Biswajit Pal
Director, Data Science, Kenvue
(Maths Alumnus, Batch: 2004)

Moderator:
Professor Avishek Adhikari
Professor & HOD
Dept. of Mathematics, Presidency University

Online Lecture on
"Mathematics for Data Science: Gradient Descent"

Organised by:
Dept. of Mathematics, Presidency University, Kolkata

Machine Learning Terminologies & Processes

Model Feature Label

that digit itself, right? So if I give you the picture which where one is written, that's a feature and the output would be 1

Avishek Adhikari

7:14 PM | ymf-vvwu-muy

"USING SIMPLE ODE AND AI MODELS TO UNDERSTAND QUESTIONS IN HUMAN AND ECOLOGICAL SYSTEMS: IDEAS AND PERSPECTIVES"

The Department of Mathematics at Presidency University, Kolkata, hosted a special lecture by Professor Kevin Duffy from Durban University of Technology, South Africa, on November 12, 2024. Titled "Using simple ODE and AI models to understand questions in human and ecological systems: Ideas and Perspectives," the lecture showcased the power of mathematical modeling in addressing complex real-world issues. Professor Duffy discussed models including elephant-tree interactions in South Africa and COVID-19 dynamics, along with Monte Carlo methods for random dispersal systems. This lecture provided valuable insights into applied mathematics and computational ecology, inspiring students and researchers alike.

Using simple ODE and AI models to understand questions in human and ecological systems: Ideas and perspectives

By
Prof. Kevin Duffy
Durban University of Technology, South Africa

Date: November 12, 2024 Time: 3.30 PM
Venue: MLT1

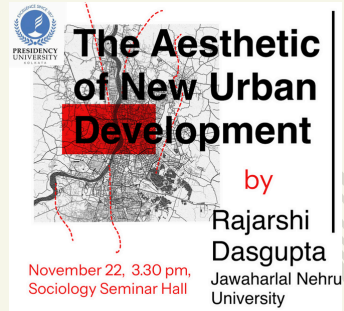
ORGANIZED BY
The Department of Mathematics, Presidency University, Kolkata, India

Abstract the Lecture
The talk will give a broad outline of the research topics of the Institute of which I am director. The common thread is the application of computational methods to 'real world' questions from the sciences. Much of this work has been to understand environmental issues using interdisciplinary research by combining the mathematical, physical and biological sciences and in particular using computational models.

ALL ARE WELCOME



EVENTS AT DEPARTMENT OF SOCIOLOGY



THE AESTHETIC OF NEW URBAN DEVELOPMENT

Dr. Rajarshi Dasgupta, a renowned scholar from JNU's Centre for Political Studies, presented a lecture examining urbanization as a template for national development, focusing on its aesthetic transformations within the neoliberal political economy. Using a South Kolkata neighborhood as a case study, he analyzed urban aesthetics in relation to populist mobilization and the evolving urban experience, posing key questions for future research. Dr. Dasgupta, an alumnus of Presidency, JNU, and Oxford, specializes in political philosophy, Marxism, and biopolitics, with notable publications on Indian Left history, urbanization, and refugee migration in South Asia.



EVENTS AT DEPARTMENT OF PERFORMING ARTS

EMBODIED EXPRESSIONS

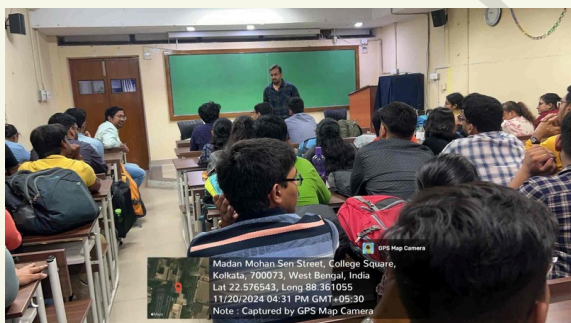
On November 25, 2024, the Department of Performing Arts organized a day-long workshop titled "Embodied Expressions" at the Dance Studio. Eminent theatre personality Sri Goutam Halder of 'Naye Natua' served as the resource person, focusing on theatre studies and the practical applications of expressions, music, dance, and speech. The workshop saw active participation from department students and other theatre enthusiasts, who engaged in practical sessions and presented short performances. The opening session was chaired by Dr. Debaroti Chakraborty, and the event was coordinated by Dr. Niladri Roy. Sri Goutam Halder's expert guidance made the workshop a highly successful and enriching experience for all attendees.



EVENTS AT DEPARTMENT OF STATISTICS

STATISTICS IN INDUSTRY: EMERGING TRENDS AND KEY CHALLENGES IN THE MODERN ERA

Dr. Soham Chakraborty conducted an interactive session on 20th November, 2024 at the Department of Statistics and discussed current industry trends and pipelines with students. He highlighted essential skillsets for thriving in modern industries and explained differences in work across various sectors. Both undergraduate and postgraduate students greatly benefited from his insights, gaining valuable guidance for their future careers.



BAYESIAN MODELING OF SPATIO-TEMPORAL DATA WITH R

An online webinar was held at the Department of Statistics on 21st Nov, 2024. Prof. Sujit Sahu, Professor of Statistics at the University of Southampton, UK was the speaker in the seminar.

the speaker delved into the unique challenges of analyzing spatial and spatio-temporal data, which differ from conventional statistical data due to inherent correlations in observations. Motivating examples highlighted the critical role of spatio-temporal analysis in environmental planning. The talk covered spatio-temporal trend and covariance functions, their properties, and the application of Bayesian hierarchical models for estimation and kriging. The speaker also introduced an R package developed to fit these models and concluded with an engaging Q&A session, enriching attendees' understanding of advanced spatio-temporal analysis techniques.



EVENTS AT DEPARTMENT OF STATISTICS

Departmental Seminar
Department of Statistics
Presidency University, Kolkata

Statistical methods for studying strength and direction of association in clinical psychology

Abstract : Although strength and direction of association are two key concepts in any statistical analysis, most methods typically focus on describing the strength of a mutual and symmetric relationship between two variables but fall short of capturing a sense of directionality, or asymmetry. Noting that said symmetry is of intrinsic value in biomedical research, I will discuss new statistical methods to quantify and infer both the strength as well as the direction of association using Shannon's information-theoretic framework.



Date : 27 th
November, 2024

Time
04.00 PM

Venue : Prof. Anil
Bhattacharya
Seminar Room

All are cordially invited

Convenor : Dr.
Atanu Kumar Ghosh



Dr. Soumik Purkayastha
Assistant Professor,
University of Pittsburgh



Madan Mohan Sen Street, College Square,
Kolkata, 700073, West Bengal, India
Lat 22.576517, Long 88.361466
11/27/2024 04:50 PM GMT+05:30
Note : Captured by GPS Map Camera



Krishna Behari Sen Lane, College Square,
Kolkata, 700073, West Bengal, India
Lat 22.576539, Long 88.361371
11/27/2024 04:50 PM GMT+05:30
Note : Captured by GPS Map Camera

GHOSH STATISTICAL METHODS FOR STUDYING STRENGTH AND DIRECTION OF ASSOCIATION IN CLINICAL PSYCHOLOGY

VENUE

On November 27, 2024, the Department of Statistics hosted an online webinar featuring Dr. Soumik Purkayastha, Assistant Professor at the University of Pittsburgh. He delivered a talk on "Statistical Methods for Studying Strength and Direction of Association in Clinical Psychology." Dr. Purkayastha highlighted the limitations of traditional statistical methods in capturing directionality in relationships between variables. Using a case study on psychological stress among U.S. university students, he introduced new methods based on Shannon's information-theoretic framework to quantify and infer both strength and direction of associations. The session concluded with an engaging Q&A segment.

EVENTS AT LIBRARY

WORKSHOP ON EFFECTIVE PREPARATION STRATEGIES AND CAREER GUIDANCE FOR UGC NET

The Presidency University Library organized a workshop on Effective Preparation Strategies and Career Guidance for UGC NET Aspirants on November 28, 2024. Coordinated by Dr. B. Siva and Ms. Kuheli Dutta, Assistant Librarians, the program featured a keynote address by Dr. Tanuja Majumdar, Professor In-Charge of Library Services. Renowned UGC NET expert Dr. Arpitha Karwa served as the resource person. The workshop attracted undergraduate and postgraduate students from Presidency University and other institutions, receiving widespread appreciation from participants for its valuable insights and guidance.

Department of Library, Presidency University, Kolkata Presents
Effective preparation Strategies and Career Guidance for UGC NET
With **ARPITA KARWA**
Gold Medalist (M.A), Ph.D.

28th November 2024, Thursday 02:00-03:30 PM
P.C. Mahalanobis Auditorium, Presidency University, Kolkata

Scan QR Code to Register

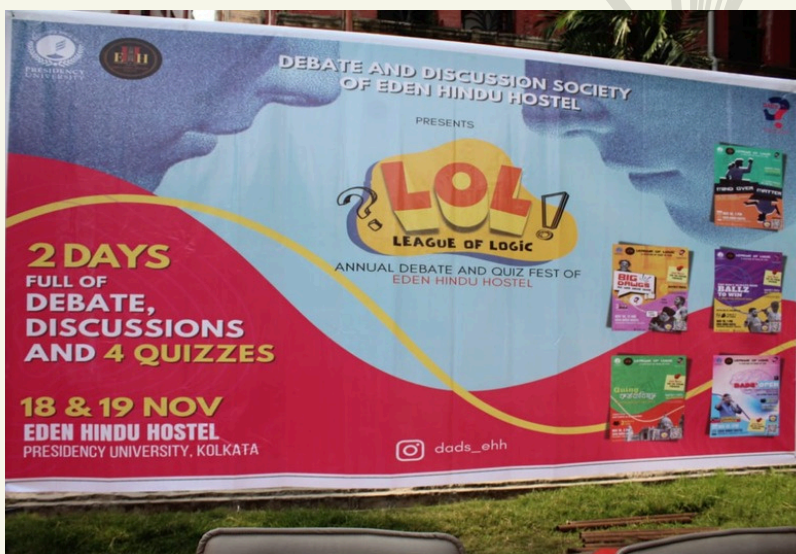


Kolkata, West Bengal, India
H9G6+CQ4, Presidency University, College Square, Kolkata, West Bengal 700073, India



Kolkata, West Bengal, India
H9g6+cq4, Calcutta University, College Square, Kolkata, West Bengal 700073, India

STUDENT ACTIVITIES



LEAGUE OF LOGIC-DEBATE AND DISCUSSION

To mark the anniversary of the Eden Hindu Hostel's Debate and Discussion Society, the League of Logic (LOL) event was held, featuring the debate competition Minds over Matter. For the first time, this educational initiative extended beyond the hostel, attracting students from Jadavpur University, St. Xavier's College, Kolkata Medical College, and more. The debate motions included "War is Necessary for Lasting Peace" and "Youth Movements Signal the Decline of Partisan Politics." Esteemed judges included professors from various institutions. The event's success was attributed to enthusiastic student participation and the efforts of the organizers, making it a memorable occasion in Kolkata's academic community.

LEAGUE OF LOGIC-QUIZ

The second day of the annual League of Logic (LOL) event, organized by the Debate and Discussion Society (DADS) of Eden Hindu Hostel, featured an exhilarating quiz competition. For the first time, such an educational initiative extended beyond the hostel, engaging Kolkata's academic and intellectual circles. Participants included students from Presidency University, Kolkata Medical College, IIT Kharagpur, and others, alongside knowledge enthusiasts. The competition featured four segments: the Gen Z Quiz, Sports Quiz, Bangaliyana Quiz, and the Open Quiz, led by Quiz Master Somnath Chanda, making it a memorable occasion.



EVENTS OF NSS CELL



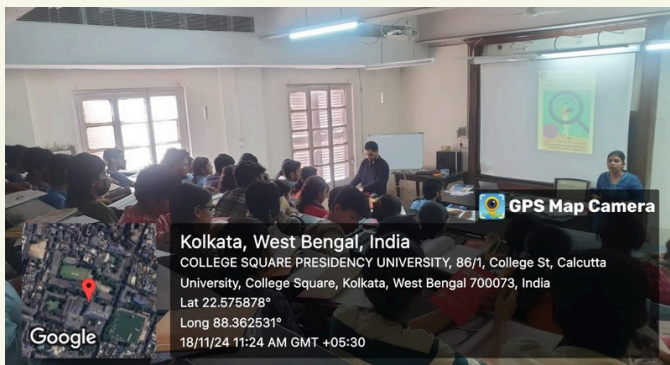
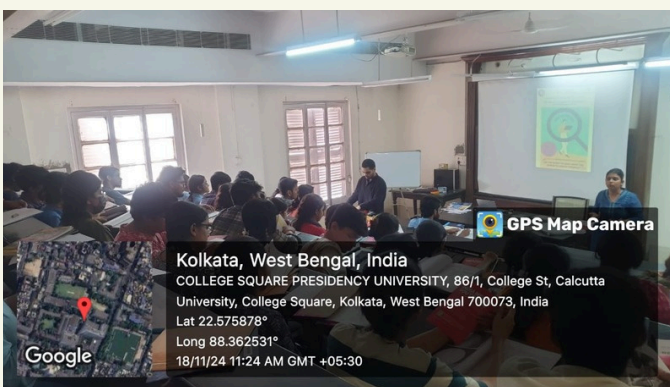
VIRANGANA (SELF-DEFENSE WORKSHOP)

The Virangana Workshop, aimed at empowering young women through self-defense training, was held on 22nd November 2024, organized by NSS Unit 2 under Dr. Mery Biswas, Assistant Professor of Geography, Presidency University. Hosted at Rotary Sadan, the program began with inspiring speeches by Shampa Ghose, Women's Empowerment Chairperson of the Rotary Club of Calcutta, and Suman Chakraborty, Secretary Member.

Sensei Utpal Chakraborty, President of SKFI-WB, led the session, teaching practical self-defense techniques for real-life scenarios, including punches, kicks, and movement-focused "Kiai." The interactive workshop also addressed health concerns and concluded with certificate distribution, leaving participants equipped and inspired.

CONSTITUTION DAY

NSS Unit-I, Presidency University, celebrated Constitution Day on 27th November 2024. The event featured an address by Dr. Jayeeta Deshmukh, pledge-taking, and speeches by NSS volunteers on the Constitution's history. With active student participation, the program concluded with a vote of thanks, emphasizing the importance of respecting constitutional values and raising awareness about its significance.



GANDHI FELLOWSHIP CAMPAIGN

The Gandhi Fellowship Program, a 23-month residential initiative fostering youth-led change and self-discovery, collaborated with NSS Unit-III, Presidency University, for a week-long campus drive. Final-year students were introduced to fellowship opportunities. Several students expressed interest, leading to plans for a WhatsApp group to share the application link and relevant details, encouraging active participation in the program.

SUCCESS STORIES

• **PRESIDENCY UNIVERSITY KOLKATA ENTERS INTO MOU WITH GEOLOGICAL SURVEY OF INDIA.**

On November 12th, 2024, Presidency University, Kolkata, signed a historic Memorandum of Understanding (MoU) with the Geological Survey of India (GSI). This collaboration builds on a long-standing relationship, as GSI played a foundational role in establishing the Department of Geology at the erstwhile Presidency College.

Hon'ble Vice Chancellor, Prof. Nirmalya Narayan Chakraborty, called this MoU a "milestone," emphasizing its potential to benefit students, scholars, and faculty through joint academic activities and participation in GSI's national projects. GSI Director General Asit Saha expressed his excitement, noting the collaboration's capacity to foster innovative research and positively impact the geoscience ecosystem.

Registrar Dr. Debajyoti Konar highlighted key areas of collaboration, including geological mapping, landslide hazard studies, seismology, sedimentology, palaeontology, petrology, geothermal energy research, and climate geoscience. This partnership aims to advance research capabilities and significantly benefit Earth Science studies.



• **PRESIDENCY UNIVERSITY KOLKATA FORMALLY EXCHANGED MOU AGREEMENT WITH VIRGINIA TECH UNIVERSITY, USA**

On November 26th, 2024, Presidency University, Kolkata, formally exchanged a Memorandum of Understanding (MoU) with Virginia Tech University, USA, in the presence of the Director of Graduate Studies of VT and Hon'ble Vice Chancellor, Prof. Nirmalya Narayan Chakraborty.

Prof. Niloy Bose, an alumnus of both universities, expressed his excitement, stating, "This marks the beginning of a productive collaboration between two Universities, close to my heart."

Prof. Chakraborty emphasized that the collaboration offers students a valuable opportunity for international exposure beyond the classroom.

Registrar Dr. Debajyoti Konar highlighted the MoU's unique feature: a two-year coordinated program allowing students to earn a STEM-certified Master's degree, spending one year at PU and the next at Virginia Tech. Graduates will also receive a three-year work permit in the U.S. under the Optional Practical Training (OPT) program, aligning with the National Credit Framework of (4+1) years, set to begin in the 2025 academic session.



OBITUARY

Presidency deeply mourns
the passing of
notable alumnus and economist

Padma Shri Bibek Debroy



1955 - 2024



(1936-2024)

Presidency deeply mourns
the passing of
notable alumnus and economist

Amiya Kumar Bagchi

