



VIT
CHENNAI



Contributory Talks: ICNCS 2025 (Virtual Mode)

*as per the IST (GMT + 05:30)

DAY 01 (08 OCT, 2025)

Contributory Talks (3:45 PM - 6:00 PM) - Panel - 11
GMeet Link: <https://meet.google.com/pox-zuwd-xkq>

Session Chairs: Dr. Shilpi Jain, Poornima College of Engineering, India
Dr. Durga Nagarajan, VIT Chennai

- ID:1966 **Don Van Nang**, Industrial University of Ho Chi Minh City, Vietnam
Event-Triggered Finite Time Space Guarantee Cost Control for Uncertain Time-Delay Fractional-Order Systems
- ID:1967 **Nguyen Hoang Huy**, Faculty of Automotive Engineering Technology, Industrial University of Ho Chi Minh City, Vietnam
Reduced-order event-triggered state observers for a full-car active suspension system with delayed input and external disturbances
- ID:2046 **Reshma Ramaswami**, Department of Mathematics, Amrita School of Physical Sciences, Amrita Vishwa Vidyapeetham, Coimbatore, India
Mittag-Leffler Stabilization of Fractional-Order Singular Time-Delay Systems using Hybrid Controller
- ID:2118 **Karuppusamy M**, Department of Mathematics, Bannari Amman Institute of Technology, Sathyamangalam, Erode, Tamilnadu, India
Estimating Reachable Sets and H_∞ Filtering for Markovian Switching Systems with Mode-Dependent Time-Varying Delays
- ID:2122 **Hassan Tahir**, MSU-BIT-SMBU Joint Research Center of Applied Mathematics, Shenzhen MSU-BIT University, Shenzhen, China
Stochastic Analysis of Worm Spread in WSNs: Lyapunov Stability and SE_1E_2IR Modeling for Enhanced Security

ID:2203 **S. Gowrisankar**, Department of Applied Mathematics and Computational Sciences, PSG College of Technology, Coimbatore
Fixed time synchronization for stochastic complex networks with time-delay

ID:2255 **Pavithra T**, Department of Physics, AMET Deemed to be University(AMET-IST Campus), Chennai
Numerical Study on Electric field induced Magnetization Dynamics in the biquadrant, anisotropic and antisymmetric ferromagnetic nanowire

ID:2260 **Naishana N**, TKM College of Engineering Kollam
Complexity analysis of Meteorological Drought across the Indian subdivisions of contrasting climate using Recurrence Theory

Contributory Talks (3:45 PM - 6:00 PM) - Panel - 12
GMeet Link: <https://meet.google.com/rih-uuia-ddg>

Session Chairs: Dr. Senthil Nayagi, PSNA College Of Engineering And Technology
Dr. Durgaprasad P, VIT Chennai

ID:2016 **S. Dinesh**, Department of Mathematics and Statistics, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur , Chengalpattu, India
Unsteady MHD Free Convection of Two-Immiscible Casson Fluids in a Porous Channel: Effects of Concentration, Radiation, and Entropy Generation

ID:2020 **M. Kaviya**, Department of Mathematics and Statistics, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur
Combined Effects of Heat Source and Chemical Reaction on MHD Casson Fluid Flow through a Vertical Channel

ID:2066 **Inturu Srinivas**, School of Mechanical Engineering, Vellore Institute of Technology, Vellore, Tamil Nadu , India
Wave Scattering by Bottom-mounted Asymmetric Inverse T - shaped Breakwater

ID:2116 **Sugarami S**, Annamalai university
Accretion Flow Around a Black hole with Electromagnetic Fields and Plasma Behaviour

ID:2764 **P.R.Sakthivel**, Research scholar, Department of Mathematics and Statistics, Faculty of Science and Humanities, SRM Institute of Science and Technology, Kattankulathur, Chengalpattu, Tamilnadu-603203, India
A analysis of non-Newtonian MHD fluid flow in the inclined channel along with permeability, pressure, and magnetic field by Python IDE

Contributory Talks (3:45 PM - 6:00 PM) - Panel - 13
GMeet Link: <https://meet.google.com/ben-qqqi-ydx>

Session Chairs: Dr. Baranibalan, Central University of Tamil Nadu
Dr. David Maxim Gururaj A, VIT Chennai

- ID:1956 **B. Kalidoss**, Anna University
Variational approach to MHD flow towards a stretching sheet with suction / injection, viscous dissipation and heat flux
- ID:1981 **Gayathri V**, Department of Mathematics, Vels Institute of Science, Technology & Advanced Studies, Tamil Nadu, India
Impact of Thermal Radiation on Rotational MHD Bioconvection of an Al_2O_3 -Water Nanofluid with Chemotaxis and Parabolic Acceleration
- ID:2117 **Srija R**, Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai
Instability of the swirling radial electric field on heat and mass transfer in Walter-B viscoelastic and viscous fluids
- ID:2153 **Rajakumari Rammoorthi**, Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai Campus, Chennai, Tamil Nadu, India.
Modeling and heat transport analysis of a time-dependent convection in a Williamson fluid over a permeable cylinder with slip effects
- ID:2261 **S. Aruna**, Department of Mathematics, St. Joseph's College of Engineering, Chennai
Optimizing Drag in Hypersonic Turbulent Flow over Cone- Ogive Shape: The Role of Jet for Various Angle of Attack

Contributory Talks (3:45 PM - 6:00 PM) - Panel - 14
GMeet Link: <https://meet.google.com/yre-zmsg-brw>

Session Chairs: Dr. Ravichandran, Kongunadu Arts and Science College
Dr. Vidhya V, VIT Chennai

- ID:1970 **Thirugnanasambanthamoorthi**, Central University of Tamil Nadu, Thiruvavur, India
Design and Analysis of a Meta-Heuristic Approach for Project Schedule Optimization Integrating Genetic Algorithm with CPMPT for Enhanced Scheduling System

- ID:1992 **F Patricia**, Department of Mathematics, Immaculate College for Women, Cuddalore.
Performance Modelling of a Single-Server Queue under Multiple Working Vacations and Partial Failures
- ID:2044 **Kaleeswari Murugan**, Department of Mathematics, The Gandhigram Rural Institute (Deemed to be University), Gandhigram, Tamil Nadu, India
A Surrogate-Assisted NSGA-II Approach for Optimal Control of Biostatisticians Professional Competency
- ID:2070 **S. P. Raghapriya**, Department of Mathematics, Vels Institute of Science, Technology & Advanced Studies
Optimizing Inventory Management Under Partial Swarn Algorithm Using Heptagonal Fuzzy Number
- ID:2083 **Palliyil Stefy Solomon**, Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai
Robust Picture Fuzzy Regression Function Approach for Stock Market Forecasting: A Systematic Estimator Comparison
- ID:2199 **M. Karthika**, Bannari Amman Institute of Technology
A Neutrosophic Hypersoft WASPAS-Entropy Model for Multi-Condition Crop Suitability in Tamilnadu
- ID:2290 **G. Caroline Vincy**, Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai, India
Embedding and the Spanning Tree Wirelength of $(K_p - C_p)^n$
- Contributory Talks (3:45 PM - 6:00 PM) - Panel - 15**
GMeet Link: <https://meet.google.com/gmy-zywu-njf>
- Session Chairs:* Dr. Nallappan Gunasekaran, Beibu Gulf University, China
Dr. Sathyarajasekaran K, VIT Chennai
- ID:1888 **Moumitha. K**, PSG College of Technology
EEG-Based Imagined Speech Classification Using Privacy-Preserving Distributed Learning Approaches
- ID:1925 **Dinesh G**, Kristu Jayanti (Deemed to be University)
Advancing Autonomous AI Agents for Scalable and Secure Enterprise Infrastructure
- ID:1986 **Jayashree BJ**, Vellore Institute of Technology, Chennai
Optimizing Air Traffic Forecasting with GRU and Machine Learning Techniques

- ID:2006 **Subhalakshmi M**, Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai, Tamil Nadu, India
Fractal Perturbations in Radial Basis Functions for Improved Interpolation and Prediction with LSTM
- ID:2154 **Joviyal Rose A.**, Vellore Institute of Technology, Vellore
A Study of Smart BI for Data Insights and Visual Analytics in Indian Scenario
- ID:2232 **J Mary Catherine**, Chevalier T. Thomas Elizabeth College for Women, Perambur
Benchmarking Graph Neural Networks for Chaotic Dynamics Prediction: A Study on Lorenz Systems
- ID:2292 **K Vetri**, Department of Mathematics, Velalar College of Engineering and Technology, Thindal, Erode, Tamil Nadu, India
Edge Detection of Images Based on the Extraction of Fuzzy Local Binary Pattern
- ID:2664 **Saranya A**, Vellore Institute of Technology, Vellore
Explainable Myocardial Infarction Classification using Testing with Concept Activation Vectors: Temporal Concept- Based Interpretability for ECG Models
- ID:2856 **Ayush Goyal**, School of Computer Science, Northumbria University ,Newcastle, UK
Comparative Study of Graph Neural Networks for Predicting Developmental Toxicity Using Molecular Graphs

Contributory Talks (3:45 PM - 6:00 PM) - Panel - 16
GMeet Link: <https://meet.google.com/uzm-ipkh-ptx>

Session Chairs: Dr. Kokila J, Central University of Tamil Nadu
Dr. Manimaran J, VIT Chennai

- ID:1962 **Dao Thi Hai Yen**, Department of Sciences, Phu Yen University, Tuy Hoa City, Phu Yen Province, Vietnam
Design of discrete-time event-triggered Takagi-Sugeno fuzzy observers for Takagi-Sugeno fuzzy time-delay models and their application to nonlinear dynamics time-delay systems
- ID:1963 **S. Gimnitz Simon**, Department of Mathematics, SRM Institute of Science and Technology, Kattankulathur , Tamil Nadu, India
Symmetry analysis of time fractional $(3 + 1) - D$ Navier-Stokes equation

- ID:1964 **Vo Thi Thanh Ha**, Faculty of Fundamental Sciences, Industrial University of Ho Chi Minh city, Vietnam
Discrete-time event-triggered state estimation for nonlinear fractional-order systems with time delays
- ID:1980 **P. Deepika**, Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore, India
Equidistribution Grid Method for Singularly Perturbed Parabolic Turning Point Problems with Robin Boundary Conditions
- ID:2086 **Keerthana G**, Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai
Optimal Control and Cost Effectiveness Analysis for a Fractional Smoking Model Using Spectral Collocation Method
- ID:2259 **Lavanya S**, Department of Mathematics, SRM Institute of Science and Technology, Ramapuram
A Fractional-Order Tumor–Immune Model for Lung Cancer with Combined Therapeutic Strategies
- ID:2323 **P. Pushpa**, St.Peter’s Institute of Higher Education and Research
Stochastic Time Series modelling for Foreign Tourist Arrivals in India

Contributory Talks (3:45 PM - 6:00 PM) - Panel - 17
GMeet Link: <https://meet.google.com/jhq-uxeo-dov>

Session Chairs: Dr. Venkatachalam M, Kongunadu Arts and Science College
Dr. Sanjit Das, VIT Chennai

- ID:1954 **A Mohammed Hakil**, C. Abdul Hakeem College, affiliated to Thiruvalluvar University, Serkkadu, Tamil Nadu, India
Fuzzy-N Soft Topology (F, N)
- ID:1987 **T. Monica**, Department of Mathematics, Immaculate College for Women, Cuddalore
QSPR modeling with topological indices of some antibiotic and related drugs
- ID:2071 **C. Yuvarani**, Department of Mathematics, DRBCCC Hindu College, Chennai
Dynamic Small-World Graphs for Quantum-Resistant Stream Cipher Encryption
- ID:2091 **M. Rajeswari**, Annamalai University
A revisit notion of circulant fuzzy matrices

- ID:2208 **Deva Nithyanandham**, MSU-BIT-SMBU Joint Research Centre of Applied Mathematics, Shenzhen MSU-BIT University, Shenzhen, China and School of Mathematics and Statistics, Beijing Institute of Technology, Beijing, China
LIFT-LLIE: A Lightweight Intuitionistic Fuzzy Technique for Low-Light Image Enhancement
- ID:2211 **S. Kalpana**, St.Joseph's College of Arts and Science(Autonomous), Cuddalore
Distance-Hereditary Fuzzy Graphs and their application in theories of mind