



VIT-AP
UNIVERSITY

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5 Day International FDP on

Advances in Nonlinear Dynamics: Methods and Applications

(ANDMA 2024)

Organized by

Department of Mathematics

School of Advanced Sciences (SAS)

11th-15th June, 2024 [Online Mode]



E-Certificate
for participation



Registration link:

<https://vtop1.vitap.ac.in/MA/Conferenceinitial>

Last date for Registration: 1st June 2024

About the FDP

The Faculty Development Program on Advances in Nonlinear Dynamics: Methods and Applications (ANDMA 2024) aims to explore cutting-edge methodologies and practical applications in the field of nonlinear dynamics. Through expert-led sessions, participants will gain insights into advanced techniques for analyzing complex dynamical systems. Topics covered will include chaos theory, bifurcation analysis, nonlinear control, and synchronization phenomena, providing a deep understanding of both theoretical foundations and real-world implications across various disciplines. Renowned scholars and practitioners in nonlinear dynamics will deliver keynote lectures and lead practical sessions, enabling participants to acquire comprehensive knowledge and skills in state-of-the-art methods and tools. Emphasis will be placed on applying nonlinear dynamics concepts to address complex challenges in diverse fields.

Objectives:

- To familiarize participants with advanced methodologies for analyzing nonlinear dynamical systems.
- To provide practical insights into the application of nonlinear dynamics concepts across diverse disciplines.
- To empower participants with skills and knowledge to address real-world challenges using state-of-the-art nonlinear dynamics techniques.

The scope of ANDMA 2024 majorly includes methods and applications of non-linear dynamics in:

- Fluid Dynamics
- Fractal Theory
- Chaotic Dynamics
- Mathematical Physics
- Astronomy
- Orbital Mechanics
- Bifurcation Theory
- Mathematical Modeling
- Time Series Analysis
- Complex Dynamics

About the University:

Established under the guidance of our founder and Chancellor, Dr. G. Viswanathan, VIT-AP University stands as a premier institution dedicated to learning, teaching, and research excellence. Globally recognized for its significant contributions, the university has earned the top position among emerging state private universities in India, according to the Outlook University Ranking 2022 and 2023. VIT-AP University encompasses seven schools, including the School of Computer Science and Engineering (SCOPE), the School of Electronics Engineering (SENSE), the School of Mechanical Engineering (SMEC), the School of Advanced Sciences (SAS), the School of Social Sciences and Humanities (VISH), the School of Business (VSB), and the School of Law (VSL). Our esteemed faculty members, drawn from the best institutions nationally and internationally, employ innovative curriculum designs. Building on VIT's 39-year legacy of educational and research innovation, VIT-AP University aligns with the tradition of excellence, blending academic rigor with industry partnerships. With a vision of establishing itself as one of the world's premier academic hubs, the university offers a dynamic campus environment conducive to holistic education and personal growth. For more details, visit: <https://vitap.ac.in/>

About the School:

The School of Advanced Sciences (SAS) at VIT-AP University comprises of Departments of Mathematics, Physics, and Chemistry. Our teaching methodology prioritizes critical thinking through Project-Based Learning (PBL), cultivating an atmosphere where students are urged to question, investigate, and engage in research across various scientific domains. Concentrating on the natural sciences, SAS strives to furnish a strong groundwork for undergraduate, post-graduate, and doctoral students, integrating recent scientific and technological progress. The school provides a range of programs including a Dual Degree B.Sc.-M.Sc. in Data Science, M.Sc. programs in Data Science, Physics, and Chemistry, as well as Ph.D. opportunities in Mathematics, Data Science, Statistics, Physics, and Chemistry. For further information, visit: <https://vitap.ac.in/school-of-advanced-sciences/>

About the Department:

The Department of Mathematics at our university stands as a beacon of academic excellence, boasting a distinguished faculty of over 65 members hailing from diverse regions across the country. These esteemed faculty bring with them a wealth of expertise and research interests that span a wide array of fields including Nonlinear Dynamical Systems, Modelling of Memory Devices, Integral Transformations, Operator Theory, Hydrodynamics Stability, Thermal Convection, Elasto Hydrodynamics, Algebraic Coding Theory, Cryptography, Fractal Theory, MHD Boundary Layers, Perturbation Methods, Stochastic Differential Equations, Approximation Using Linear Positive Operators, Fluid Dynamics, Nonlinear Mathematical Programming Problems, Solute Transport Modelling, Graph b-Coloring, Cosmology, and beyond. Furthermore, the department is committed to fostering academic growth and offers a comprehensive range of mathematical courses tailored to meet the needs of various programs offered by the university. Among its offerings are two prominent programs: the Dual Degree Program in B.Sc.-M.Sc. Data Science and the M.Sc. Data Science program, both of which provide students with a robust foundation in mathematical theory and its practical applications within the realm of data science. The department offers Ph.D. programs in various disciplines of Mathematics, Data Science and Statistics as well. Through its dedicated faculty, diverse research interests, and extensive course offerings, the Department of Mathematics continues to be a cornerstone of academic excellence of the university. For more details, please visit: <https://vitap.ac.in/department-of-mathematics/> faculty, diverse research interests, and extensive course offerings, the Department of Mathematics continues to be a cornerstone of academic excellence of the university. For more details, visit: <https://vitap.ac.in/department-of-mathematics/>

Resource Persons



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Professor
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Thiruvananthapuram, India



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Professor
Dept. of Mechanical and Process
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Dr. Anant Kant Shukla
Assistant Professor
Dept. of Mathematics, SAS,
VIT-Bhopal University, India

Who can Register :

- ❖ PG Students
- ❖ Research Scholars
- ❖ Professionals from Academia and Industry

Important Dates:

Last Date of Registration: **1st June, 2024,**

FDP Dates: **11th to 15th June, 2024**

Registration Fee:

- ❖ Indian Participants: ₹ 400
- ❖ Foreign Participants: \$ 10

Prof. S Srinivas, (Dean SAS)
Chairperson

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Convenor

Dr. Shah Parth Mukeshbhai
Convenor

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