

"Everything is theoretically impossible until it is done."

5th

Foundation Week

19th – 26th
JANUARY
2025

$\Psi(t)$ Physics Society of
IISER THIRUVANANTHAPURAM

Symposium | Competitions | Merchandise

5th

Foundation
Week

INAUGURATION

19th Jan 2025

Sunday

3:00 pm

PSB Seminar Hall



Chief Guest

Prof. J. N. Moorthy

Director

IISER Thiruvananthapuram

5th

Foundation
Week

TIMELINE

INAUGURATION
Chief Guest Prof. J. N. Moorthy
Director, IISER Thiruvananthapuram
19 Jan 2025, 3:00 pm, PSB Seminar Hall

BOLTZMANN BRAINS 6.0
20 Jan 2025, 9:00 pm, LHC Venus

PANEL DISCUSSION
Women in Science
22 Jan 2025, 6:30 pm

SCI-FI STORY WRITING
23 Jan 2025, 9:00 pm Onwards

GAMES NIGHT
24 Jan 2025, 9:00 pm

POSTER PRESENTATION
26 Jan 2025

INAUGURAL TALK
Prof. Ranjit Kumar Nanda B
IIT Madras

19 Jan 2025, 3:30 pm, PSB Seminar Hall
Different Facets of research in Condensed Matter Theory

SYMPOSIUM TALK 1
Prof. G Ambika

IISER Thiruvananthapuram
21 Jan 2025, 6:30 pm, PSB Seminar Hall

SYMPOSIUM TALK 2
Dr. Umesh

IIST Thiruvananthapuram
23 Jan 2025, 6:00 pm

DEPARTMENT GET TOGETHER

24 Jan 2025, 6:00 pm - 7:30 pm

WORKSHOP
RAD@Home Astronomy Workshop
Dr. Ananda Hota

UM-DAE Center for Excellence in Basic Sciences
25 Jan 2025, 9:30 am - 12:30 am

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Prof. Ranjit Kumar Nanda B

IIT Madras

TOPIC

Science Education and the importance of Visuospatial Thinking

19th Jan 2025, Sunday

3 pm

PSB Seminar Hall

ABOUT THE SPEAKER

Dr. B. Ranjit Kumar Nanda is a distinguished Professor in the Department of Physics at the Indian Institute of Technology Madras (IIT Madras). He completed his Ph.D. in Physics at IIT Bombay in 2006, followed by postdoctoral research at the University of Missouri, Columbia, where he delved into the intricate world of perovskite oxide interfaces. Joining IIT Madras in 2011 as an Assistant Professor, he steadily rose through the ranks, becoming an Associate Professor in 2016 and eventually a full Professor. Dr. Nanda's research is rooted in the realm of condensed matter theory, with a particular focus on the electronic structure of solids. His work spans an impressive range of topics, including strongly correlated electron systems, topological materials, advanced magnetic materials, catalysis, surface science, and energy materials. By employing sophisticated computational approaches such as density-functional theory (DFT) and tight-binding models within the Hartree-Fock framework, Dr. Nanda provides profound insights into the behavior of many-electron systems and the physical properties of materials. Over the course of his career, Dr. Nanda has mentored numerous Ph.D. students and has authored a wealth of impactful publications. His research has significantly enhanced the understanding of the electronic and magnetic properties of complex materials, paving the way for innovations in functional materials with real-world technological applications. Beyond his contributions to research, Dr. Nanda is deeply committed to the academic growth of his students and peers at IIT Madras. He fosters a culture of collaboration, inspiring the next generation of physicists while actively engaging in research partnerships within and beyond the institution. His body of work is exemplified by several noteworthy publications, including studies on halide perovskites and fluorine intercalated graphene, which highlight his expertise and contributions to advancing knowledge in the field.

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Prof. G. Ambika

IISER Thiruvananthapuram

TOPIC

Geometry of Nature

21 Jan 2025, Tuesday

6:00 pm

Venue: LHC Venus

ABOUT THE SPEAKER

Prof. G. Ambika is an Honorary Professor of Physics at the Indian Institute of Science Education and Research (IISER) Thiruvananthapuram, renowned for her groundbreaking contributions to nonlinear dynamics and the study of complex systems. Her research delves into analyzing the complexity of systems through nonlinear dynamics, recurrence analysis, and complex networks, often leveraging observational data to unravel intricate behaviors in natural and engineered systems.

Throughout her illustrious career, Prof. Ambika has held significant editorial and administrative roles. She is a member of the Editorial Board for Philosophical Transactions A of The Royal Society, London, and has served as an Associate Editor for the European Physical Journal Special Topics. She also contributed to the Proceedings of the Royal Society A as an editorial board member for several years.

In addition to her research, Prof. Ambika has played a pivotal role in academic leadership. She served as the Dean (Academics) at IISER Tirupati, where she pioneered efficient student administration systems that continue to be adopted by other IISERs.

Prof. Ambika has been recognized for her impactful publications, with recent works appearing in prestigious journals such as Physics Letters A and Chaos. Her research on synchronized oscillations in multiplex networks and machine learning approaches to dynamical state detection has garnered critical acclaim, with several articles featured as Editor's picks.

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Dr. Umesh R. Kadhane

Associate Professor
IIST

TOPIC

In search of molecular life in our solar system:
opportunities and challenges

23rd Jan 2024, Thursday
6:00 pm

ABOUT THE SPEAKER

Dr. Umesh R. Kadhane is a distinguished Professor and Associate Dean in the Department of Physics at the Indian Institute of Space Science and Technology (IIST), Thiruvananthapuram. A physicist of notable repute, Dr. Kadhane earned his Ph.D. in Physics from the prestigious Tata Institute of Fundamental Research (TIFR), Mumbai. His academic foundation also includes an M.Sc. and B.Sc. in Physics from the University of Mumbai.

Dr. Kadhane's research interests span both experimental and theoretical atomic and molecular physics. His work focuses on cutting-edge areas such as X-ray emission spectroscopy of highly charged ions, molecular photoabsorption spectroscopy, and mass spectrometry of molecular ions. These studies hold significant implications for advancing our understanding of biomolecules, cluster ions, and giant resonances, contributing to critical knowledge in physics and related interdisciplinary fields.

Over his illustrious career, Dr. Kadhane has held several prominent academic and research positions. Notably, he served as an Assistant Professor at the Indian Institute of Technology Madras and worked as a Doctoral Fellow at the University of Paris Sud, France, and the University of Aarhus, Denmark. At IIST, Dr. Kadhane has been instrumental in developing major mass spectrometry and electron spectrometry systems, and he has mentored numerous undergraduate, postgraduate, and doctoral students, shaping the next generation of physicists.

Dr. Kadhane's contributions extend beyond academia to India's space research initiatives. He currently serves as the Deputy Project Director for the High Thrust Electric Propulsion System at the Liquid Propulsion Systems Centre (LPSC). Additionally, he is the principal investigator for several groundbreaking payload activities at IIST, including the development of plasma measurement instrumentation for exploratory missions around Earth, Mars, and Venus.

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BOLTZMANN BRAINS

6.0

20th JANUARY 2025
MONDAY
9:00 PM

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RAD@home Astronomy Workshop

By

Dr Ananda Hota

UM-DAE CEBS, Mumbai

25th Jan 2025

Saturday

9:30 AM - 12:30 PM

Mode : Hybrid

Join us for the upcoming RAD@home Astronomy Workshop, a unique opportunity to engage in citizen science research in radio astronomy. This workshop is designed for science enthusiasts eager to contribute to real astronomical discoveries. Experience an engaging lecture on Black Hole-Galaxy Co-evolution, followed by a hands-on session guiding participants toward active involvement in Citizen Science Research.

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GET
TOGETHER

24th JANUARY 2025

FRIDAY

6:00 PM

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POSTER PRESENTATION

26
JANUARY
2025

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"Women in Science" Panel Discussion

22 JANUARY 2025

6:00 PM

LHC JUPITER

5th

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SCI - FI STORY WRITING

23th

JANUARY

2025

ONWARDS..

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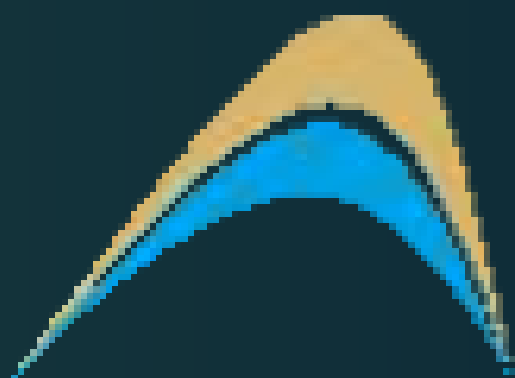
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