Public Relations Office
Jamia Millia Islamia

February 11, 2025

Press Release

Unravelling the Cosmos: 6th V. V. Narlikar Memorial Lecture at Jamia Millia Islamia

The Centre for Theoretical Physics (CTP) at Jamia Millia Islamia successfully hosted the **6th V. V. Narlikar Memorial Lecture**, an annual event dedicated to celebrating the legacy of **Prof. Vishnu Vasudev Narlikar**, a pioneering Indian relativist whose contributions have profoundly shaped the field of theoretical physics and cosmology. This year's distinguished speaker was **Prof. Tarun Souradeep**, Director of the **Raman Research Institute**, who delivered an insightful lecture titled **"Quest for Cosmic Origin."** The event was attended by eminent scholars, faculty members, students, and researchers from various institutions, reflecting the significance of this annual academic gathering.

Prof. Tarun Souradeep's lecture focussed on one of the most fundamental and profound questions in cosmology: **How did the universe begin?** His talk deeply explored the **early universe, cosmic inflation, the cosmic microwave background (CMB), and the latest observational data that shape our understanding of the cosmos.** With his expertise in **precision cosmology and astrophysics**, Prof. Souradeep emphasized the role of **CMB anisotropies and gravitational waves** in uncovering the physics of the early universe. He also highlighted advancements in **next-generation observational missions**, including ground-based and space-based telescopes, that aim to probe deeper into the **Big Bang's imprints on cosmic structure formation.** Additionally, he highlighted advancements in **next-generation observational missions**, including ground-based and space-based telescopes, that aim to probe deeper into the **Big Bang's imprints on cosmic structure formation.**

The program commenced with a **welcome address** from **Prof. Sushant Ghosh**, Director of the Centre for Theoretical Physics. In his address, Prof. Ghosh highlighted the **importance of theoretical physics and cosmology in shaping our understanding of the universe** and the role of **Jamia Millia Islamia's Centre for Theoretical Physics's contribution** to cutting-edge research in these domains. He also emphasized the significance of the **V. V. Narlikar Memorial Lecture Series** in inspiring future generations of physicists and fostering a vibrant academic culture. Prof. Tabish Qureshi followed with an introduction to the Centre's research activities**.** Prof. **Rathin Adhikari** provided insights into **Prof. V. V. Narlikar's** significant contributions and the legacy that this memorial lecture upholds. Prof. **Anjan Sen** introduced the speaker, highlighting **Prof. Souradeep's impactful contributions** to observational and theoretical cosmology. The lecture concluded with an engaging **Q&A session** where students and faculty actively participated.

The successful organization of the event was made possible through the dedicated efforts of the **PhD scholars, faculty members, and staff of the Centre for Theoretical Physics**. Their meticulous planning and hard work ensured attendees a seamless and intellectually stimulating experience. The program was attended by approximately **70 scholars from Jamia Millia Islamia**, along with esteemed faculty members from **Netaji Subhas University of Technology (NSUT) and Delhi Technological University (DTU).** Their participation underscored the broad academic interest in the lecture's themes and the scientific community's collaborative spirit.

This distinguished lecture series, named in honour of the eminent scientist Prof. V. V. Narlikar, is an essential academic initiative, fostering intellectual engagement and inspiring our academic community through interactions with internationally renowned scientists. Over the years, this series has hosted eminent speakers such as **Prof. M. G. K. Menon, Prof. Siraj-ul-Hasan, Prof. Ajit Kembhavi, Prof. Naresh Dadhich, and Prof. Pankaj Joshi.**

The **Centre for Theoretical Physics (CTP)** at Jamia Millia Islamia continues to be an epicentre of excellence in **general relativity, cosmology, quantum field theory, and high-energy astrophysics.** Recognized for its groundbreaking research, CTP was honoured with the **President's Award for Best Research in 2015.**

The V. V. Narlikar Memorial Lecture promotes scientific dialogue and inspires young minds to explore the **universe's wonders.** With leading experts sharing their research, the lecture series aims to continue **bridging theoretical advancements with observational breakthroughs.**

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Next Generation CMB mission
CMB-Bharat mission presents an unique opportunity for India to take the lead on prized quests in fundamental science
Thank you !!!


Quest for Cosmic origin
Tarun Souradeep
Director
Raman Research Institute
JAMIA MILLIA ISLAMIA
Quest for Cosmic Origins

Centre for Theoretical Physics
JAMIA MILLIA ISLAMIA

Jamia Nagar, New Delhi - 110 025

Cordially invites you to attend the *Sixth V V Narlikar Memorial Lecture* on

Quest for Cosmic Origin

By *Prof. Tarun Souradeep*

Director, Raman Research Institute, Bengaluru

Prof. Tarun Souradeep

Professor Tarun Souradeep *is the Director of the Raman Research Institute (RRI) in Bengaluru, India, a position he has held since January 20, 2022. Before this, he served as a professor and Chair of the Physics Department at the IISER, Pune. He has led Indian efforts in Cosmic Microwave Background (CMB) experiments and the emerging field of gravitational wave astronomy. Notably, he was the spokesperson (science) for the LIGO-India project and the member secretary of the LIGO-India Scientific Management Board. He was among the lead proposers of the LIGO-India project in 2011. Prof. Souradeep earned his PhD from the Inter-University Centre for Astronomy and Astrophysics (IUCAA) and completed postdoctoral fellowships at Kansas State University's High Energy Physics Group and the Canadian Institute for Theoretical Astrophysics. Prof. Souradeep has received numerous accolades throughout his career, including the DST Swarna Jayanti Fellowship, the Gruber Cosmology Prize in 2016 and 2018, and the Special Breakthrough Prize in Fundamental Physics in 2016. He is a fellow of the National Academy of Sciences and the Indian Academy of Sciences. His election to the International Society on General Relativity and Gravitation fellowship emphasises his esteemed standing in the global scientific community.*

February 10, 2025 Monday @ 04:00 pm *Venue: CTP, Seminar Hall*

From the vantage point of a tiny speck of cosmic dust, Earth, humanity has made commendably robust deductions about cosmic history, composition and architecture across unimaginably vast scales of space and time. My talk attempts to convey this spectacular success story of human intellect and technical ingenuity in the ongoing pursuit of the timeless quest to understand our place in the vast cosmos and unravel its origin.

For inquiries, please contact:
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