



**PUNE KNOWLEDGE CLUSTER & INDIAN ACADEMY OF SCIENCES PRESENT INDIA S&T @ 75
LECTURE SERIES**

Title: Mathematical Physics and Reality

Organized By	Pune Knowledge Cluster (PKC)
Date	26th July 2021
Time	11:00 AM - 12: 30 PM
Abstract	Mathematical Physics is sometimes thought of as a realm of abstruse speculation disconnected from experimental reality. Using history as a guide, I will show that quite the opposite is true -- considerations of theoretical and mathematical consistency have explained and even predicted many important experimentally observed phenomena over the past century. These include objects like elementary particles and black holes, as well as phenomena like phase transitions and novel transport properties.
Open to all	It's public talk. Open to all
Potential Gains	As a part of the "India S&T @75" events during the countdown to the 75th year of India's independence, the Pune Knowledge Cluster will be organising a number of lectures on scientific topics. These lectures will be delivered by Fellows and Associates of the Indian Academy of Sciences, who are based in Pune, and will be organised in association with the Academy. The lectures will cover a wide variety of topics, ranging from cutting edge science and technology to developments in these areas in the country over the 75 years since independence.
Speaker	Prof. Sunil Mukhi , Fellow, Indian Academy of Sciences



Profiles of Speaker

Brief information about the speaker



Prof. Sunil Mukhi obtained a Ph.D. in Theoretical Physics from Stony Brook University in 1981. His field of specialisation is theoretical particle physics. His research has explored mathematical aspects of Supersymmetry, Conformal Field Theory, Superstring and M-Theory, Non-commutative Field Theory and Quantum Gravity. After working at the Tata Institute of Fundamental Research, Mumbai for 27 years, he moved to the Indian Institute of Science Education and Research, Pune in 2012 to engage in pedagogy at a larger scale. He has taken year-long sabbaticals at CERN (Geneva) and the Institute for Advanced Study (Princeton) and has been a Visiting Fellow Commoner at Trinity College, Cambridge. He is a Fellow of the Indian Academy of Sciences, the Indian National Science Academy and The World Academy of Sciences, and received the Shanti Swarup Bhatnagar Prize in Physical Sciences in 1999. He has been an Editor of the Journal of High Energy Physics, the leading journal in the field, since its inception in 1997. He has a keen interest in academic ethics and chairs the Panel on Scientific Values of the Indian Academy of Sciences.

About the Organizer



The Pune Knowledge Cluster (PKC) has been established by the Office of the Principal Scientific Adviser to the Government of India. It aims to bring together academia, R&D institutions, and the industry of Pune and its surrounding areas, to address the challenging problems of the region through innovative means, using scientific knowledge and engaging highly skilled human resources.

PKC is administered by the Inter-University Centre for Astronomy and Astrophysics (IUCAA). In the initial phase, PKC would focus on Health, Sustainability and Environment, Sustainable Mobility, BIG Data and AI and Capacity Building

For more information, visit: <https://www.pkc.org.in/>