

A Re-look into Gravitation and Inertia and the Emerging Picture of the Universe

Topic: A Re-look into Gravitation and Inertia and the Emerging Picture of the Universe

Speaker: Prof. Amitabha Ghosh (Former Director, IIT Kharagpur)

Venue: Community Centre, IIT Bhubaneswar Campus

Date: 22nd Oct. 2019 (Tuesday)

Time: 5.45 P.M. to 6.45 P.M.

Abstract:

At the beginning the lecture presents a brief discussion on the Newton's Laws of Motion and Universal Gravitation highlighting the difficulties associated with these laws. It is next shown how a simple extension of the law of gravitation eliminates all the difficulties and it results in a slightly modified second law of motion. Application of this modified law to various unresolved problems of solar system dynamics results in excellent outcome resolving the unresolved issues. When applied to galactic, extragalactic and cosmological problems a number of amazing consequences emerge hinting at some fundamental modifications of our concept of the cosmos.

Biography of the Speaker:

Professor Amitabha Ghosh started his teaching career in May 1965 as a Lecturer in Mechanical Engineering at Bengal Engineering College, Shibpur and shifted to IIT Kanpur in December 1970 as an Assistant Professor. In June 1975 he became a Professor of Mechanical Engineering and served the Institute till his retirement in 2006. After retirement he continued to teach at Bengal Engineering and Science University (now Indian Institute of Engineering Science and Technology, Shibpur) as a Distinguished Professor in Honorary capacity in 2007. At the same time he served INSA as a Senior Scientist for five years, NASI for the next five years and since 2017 January he is an Honorary Scientist of

INSA. He visited Technical University Aachen, Germany since 1977 many times till 2013 as a Senior Fellow of the Alexander von Humboldt Foundation. From 1997 to 2002 Prof. Ghosh also served IIT Kharagpur as the Director. He has served as the Chairman of a number of national level institutions and committees of the MHRD, DST and CSIR. He served as the Indian coordinator of Indo-Japan DST – JSPS collaboration programme and of Indo-US Joint Centre for Advanced Manufacturing. His primary areas of academic activities have been, Advanced Manufacturing, Machine Dynamics and Vibration and Basic Mechanics including Gravitational Mechanics. He was the first to start teaching and research in Robotics in India in 1984 and the first Robotics Centre was set up at IIT Kanpur in 1986 with Prof Ghosh as the Founder Head. Professor Ghosh is well known in the engineering fraternity for the text books authored by him. He is a Fellow of all the Science and Engineering Academies of India.





