



DEPARTMENT OF PHYSICS  
INDIAN INSTITUTE OF TECHNOLOGY KANPUR

## PROFESSOR J MAHANTY MEMORIAL LECTURE ON

# THE EVOLUTION OF QUANTUM THEORY AND A SIMPLE DERIVATION OF BELL'S INEQUALITY

## PROF. AJOY GHATAK



**Prof Ajoy Ghatak** is currently an Honorary Professor at the Optics & Photonics Center, IIT Delhi. During 2021-22, he was the President of The National Academy of Sciences, India – the oldest Science Academy in India. He did his MSc from Delhi University and PhD from Cornell University. He is a Fellow of OPTICA (formerly OSA) and SPIE. He has authored several books including his undergraduate text on OPTICS which has been translated into Chinese and Persian. He is the recipient of several awards including the 2003 OSA Esther Hoffmann Beller Award and the 2008 SPIE Educator award which was in recognition of “his unparalleled global contributions to the field of fibre optics research, and his tireless dedication to optics education worldwide..” and also the CSIR 1979 S S Bhatnagar award.

## ABOUT THE TALK

Alain Aspect, John Clauser and Anton Zeilinger have been awarded the 2022 Nobel Prize in Physics for their experiments with entangled photons, establishing the violation of Bell's inequalities and pioneering quantum information science. The lecture will briefly discuss the evolution of quantum theory, the concept of entanglement and give a simple derivation of Bell's inequality.

## PROF. J MAHANTY



**Prof. Jagadishwar Mahanty** was a Physics Department faculty member at IIT Kanpur from 1961-1972. Prof. Mahanty made important contributions to Condensed Matter Physics, particularly the study of many-body physics, lattice dynamics, van-der-Waals interactions and electronic structure of solids. In 1961 he joined the Physics department of IIT Kanpur. He was instrumental in shaping the Physics department during its infancy. He was the Head of the Physics department from 1967 to 1972.



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