



## University of Miami, Physics Department Colloquium

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**Date:** Wednesday, Mar 25, 2026  
**Time:** 4:00 pm – 5:00 pm  
**Location:** Physics Library – Rm 335, Knight Physics Building

### Interaction-free Measurement and Beyond

**Dr. Suhail Zubairy**  
Texas A&M University

#### **Abstract**

It is truly amazing that, even today, an understanding of simple systems can lead to startling new ideas and devices. In this talk I shall discuss how the simplest quantum optical devices like mirrors and beam splitters can be employed in areas such as interaction-free measurement, quantum secure communication, generation of elusive Schrodinger-cat states of the radiation field, and communication with invisible photons.

#### **Biography**

Professor M. Suhail Zubairy received his Ph.D. from the University of Rochester in 1978. He is presently a University Distinguished Professor in the Department of Physics and Astronomy and the holder of the Munnerlyn-Heep Chair in Quantum Optics at Texas A&M University. He has made several pioneering contributions in the fields of Quantum Optics and Laser Physics. He is the co-author of two books, one on Quantum Optics and the other on Quantum Computing Devices. Recently, he published two books, the first entitled Quantum Mechanics for Beginners and the other entitled A Mysterious Universe. In recognition of his contributions to the field of Quantum Optics and Laser Physics, Prof. Zubairy has received many honors including the Willis E. Lamb Award for Laser Science and Quantum Optics, Alexander von Humboldt Research Prize for Distinguished Scientists, the Changjiang Distinguished Award, the Outstanding Physicist Award from the Organization of Islamic Countries, the Abdus Salam Prize in Physics, the International Khwarizmi Award, and the George H. W. Bush Award for Excellence in International Research.