

SPECIAL CHEMICAL PHYSICS AND PIZZA SEMINAR SERIES**

“Let There be Light: Genesis of Long Meteor Trails and Sodium Nightglow”

Dudley Herschbach

*Department of Physics and Institute for Quantum Studies
Texas A&M University*

Abstract

Everyone has seen meteors flash across the night sky, leaving a glowing trail stretching far behind. But few people are aware that a steady, ubiquitous nightglow from the atomic sodium D-line extends over the full skyscape. Very few viewers know about the chemical physics involved in either the meteor trails or the nightglow and the connections between them. This talk will trace an unfinished saga of research, extending over the past 70 years. As well as elucidating surprising aspects of both meteor trails and nightglow, and emphasizing unsettled issues, the talk will offer tutorial discussions of molecular electronic spectroscopy and orbital correlation diagrams.

**Thursday, October 14, 2010
11:30 a.m. IQSE 578
Mitchell Physics Building**

**Texas A&M University
Department of Physics**

(Pizza, salad, and soda to be served at 12:30 p.m. outside IQSE 578)

** Grad students and postdocs are invited to participate in the “Entanglement Club” for further discussions on various aspects of entanglement, pertaining to quantum optics as well as quantum computing, to be held on Wednesday, October 13, 10 AM – 12 noon, in IQSE 578.