

UNIVERSITY OF TEXAS AT DALLAS - DEPARTMENT OF PHYSICS
Astrophysics, Cosmology and Relativity Group
Office of the Vice-President for Research
PHYSICS COLLOQUIUM

<http://www.utdallas.edu/physics/lectures/info/>

Wednesday, April 18, 2007; 4:00-5:00 PM
Kusch Auditorium, FN 2.102

**Observational Probes of the Dark Side of the
Universe**

Professor Richard Ellis

California Institute of Technology

The dominant energy densities of dark matter and dark energy present outstanding puzzles for physicists and astronomers. As a result ambitious experiments and space missions are being proposed to make progress. I will review recent results in this area and discuss critically the future roles and challenges in the use of distant supernovae, gravitational lensing and large scale structure studies in illuminating the dark side of the Universe.

About the speaker: Dr. Richard Ellis is Steele Professor of Astronomy at California Institute of Technology and Director of Caltech Optical Observatories. His previous positions include: Director, Institute of Astronomy University of Cambridge (UK); Plumian Professor of Astronomy, University of Cambridge; Director, Palomar Observatory. Dr. Ellis is Fellow of the Royal Society; Fellow of the Institute of Physics; Fellow, University College London; Fellow, American Association for the Advancement of Science. He is working primarily in observational cosmology addressing issues related to the nature of the world model, the origin and evolution of galaxies, the growth of large scale structure and the nature and distribution of dark matter. He is enthusiastic about the use of new instruments and observational opportunities when they further the progress that can be made in these areas. Dr. Ellis published over 350 scientific articles and edited 3 books.