

# **SPECIAL AMO PHYSICS PIZZA SEMINAR**

**“The Sizes, Shapes, and Changes of Stars as  
Measured with Infrared Interferometry”**

**Dr. Charles H. Townes**

*University of California, Berkeley*

## *ABSTRACT*

The Infrared Spatial Interferometer uses three movable telescopes of 60 inch diameters to measure the sizes, shapes, and changes in the size of stars, along with the positions and changes of dust and gas surrounding them. Heterodyne detection is used at wavelengths near 11 microns, which allows high spectral resolution to either avoid spectral lines of gas surrounding the stars or make measurements specifically of the gas itself. Such measurements and their results will be discussed.

**Thursday, December 3, 2009**

**12:30 noon**

**256 Jack E. Brown**

**Texas A&M University  
Institute for Quantum Science & Engineering**

(Pizza, salad, and soda to be served at 12:00 noon)