

# Physics Department Seminar

Friday March 14<sup>th</sup>, 2003

11:00am in PhSc 105

## “Experimental Exploration of the Quantum Vacuum through the Casimir Force”



Dr. Umar Mohideen  
Department of Physics  
University of California, Riverside

### Abstract:

Quantum theory predicts that the vacuum (empty space) is filled with virtual particles also referred to as zero point energy. H.B.G.Casimir, calculated an extraordinary property, that two uncharged metallic plates placed parallel in vacuum, would experience an attractive force due to the alteration of the zero point electromagnetic energy. Some of the fascinating aspects of the force, its implications and its measurements will be discussed.

“Dark Energy”

green laser