Philip Bos

Professor of Physics

Kent State University

Title: **Optical Devices based on Pancharatnam Phase**

Abstract: Optical devices based on Pancharatnam phase defy the performance limits of conventional optics.  Optical beam steering to large angles with near 100% efficiency, and lenses with a very low

f- number are possible.  And possible with thin films of material that are only a few microns thick.

In this talk I will attempt to provide an intuitive understanding of these devices; show the wave propagation though them; and discuss their limitations.