



SACRAMENTO STATE

Department of Physics & Astronomy Fall 2005

Physics Colloquium Series

“Artificial Sight: An Optoelectronic Retinal Prosthesis”

Blindness is more feared by the public than any ailment except cancer and AIDS, and retinal degeneration is the leading cause of blindness in developed countries. I will describe development of a high resolution optoelectronic retinal prosthetic system with a pixel density up to 2,500 pix/mm², corresponding geometrically to a maximum visual acuity of 20/80. We will review some of the challenges and solutions including the physical limitations on spatial resolution of the retinal stimulation, delivery of information and power to the implant, and the issues of the real time image processing.

Daniel Palanker

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Stanford University*

**Thursday, Nov 10, 2005
4:00-5:20 PM MND 1015**

OPEN & FREE TO ALL STUDENTS, FACULTY & PUBLIC