



SACRAMENTO STATE

Department of Physics & Astronomy ~ Fall 2005



Physics Colloquium Series

High-performance Active Liquid Crystalline Shutters For Stereo Computer Graphics and other True 3D Technologies

Stereoscopic computer displays create a 3D image by alternating two separate images for each of the viewer's eyes. Field-sequential viewing systems can provide stereoscopic images without requiring major changes to existing display systems. The system supplies each of the viewer's eyes with the correct image by blocking the wrong image for the wrong eye. The most effective field-sequential stereoscopic viewing systems utilize liquid crystalline materials as an active medium for the glasses that are responsible for sorting out images. We developed several new modes of operation of liquid crystal shutters that provide high contrast and ultra-high switching speeds that allow an effective blockage of undesired images when the screen is viewed at off-normal directions and eliminate color shifts associated with long turn-off times.

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Sacramento State, Physics

Thursday, Nov. 3, 2005

4:00-5:20 PM MND 1015

OPEN & FREE TO ALL STUDENTS & FACULTY