

# ***Physics Colloquium Series***

## ***~ Student Talks ~***

### ***“Wide Angle Achromatic Prism Beam Steering for Infrared Countermeasures and Imaging Applications”***

*A two-rotating-prism system is an inexpensive lightweight two-dimensional beam steering device. Moreover, it can be designed to be achromatic over a wide spectral range. However, the current two-prism design has a singularity problem at the center of the viewpoint. If a beam is to be steered through the center, one of the prisms must make an instantaneous 90 degree flip. This research solves this problem by adding a third prism to the system. The apparatus is optimized by minimizing dispersive effects.*

## **Henry Garcia**

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### ***“Instrumentation and the Classical Vibrating String Experiment”***

*This talk discusses the development of instrumentation, and computer aided data acquisition and analysis, to investigate the classical vibrating string experiment. Several problems were found in our experiment setup by analyzing the data quickly using the computer. Difficulties included noise from ambient sources and the inability to hold the end points of the string fixed. These problems were analyzed, explored, and fixed to improve the instrumentation used to measure the vibrating string.*

## **Aaron Pypers**

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### ***“Stealth Technology in Today’s Armed Forces”***

## **Christopher Ray**

*~ CSUS Physics majors ~*

**Tuesday, May 10, 2005**

**4:00-5:20 PM MND 1015**

**OPEN & FREE TO ALL STUDENTS & FACULTY**