



SACRAMENTO STATE

Department of Physics & Astronomy Fall 2007

# *Physics Colloquium Series*

## *"Did You Hear That?: Adventures in Hypersonic Sound"*

### *The plan:*

*Due to the non-linearity of air, at high sound amplitudes two ultrasonic sources can be made to mix and produce difference waves in the audible range. Two parametric arrays will be used as the ultrasonic sources. The spacing and number of elements in the array will be varied to determine how each affects the sound output. Frequency range, pressure level and distortion will be measured in response to changes in the parametric array.*

### *The reality:*

*We need more power!*

# *Joshua French*

## *Senior Project Presentation*

**Tuesday, November 27, 2007**

**4:00-5:20 PM SQU 232**

**Open & Free to all Students, Faculty & Public**