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Thursday, 19 June 2014 14:02

H2-27: PHASE REVERSAL BETWEEN STEREO SPEAKERS - OSCILLATOR

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Additional Info

ID Code: H2-27

Purpose: Dramatically demonstrate interference between two identical sources.

Description: Two loudspeakers are connected in the monaural mode to the power amplifier. A switch box in the leads of one of the speakers allows reversal of the phase of that speaker.

A nice experiment shows the relation of phase to physical position. Set the speakers to monaural and play an 80 Hz tone into the two speakers, then reverse the phase to reduce the sound to virtually nothing. Uncoil the wire from the back of one speaker and move the speaker 12 or 15 feet across the front of the room; the loud bass tone returns! The waves from the two speakers are no longer out of phase.

Availability: Available

References: REFERENCES: (PIRA unknown.)

Videos-1: Click to see the action

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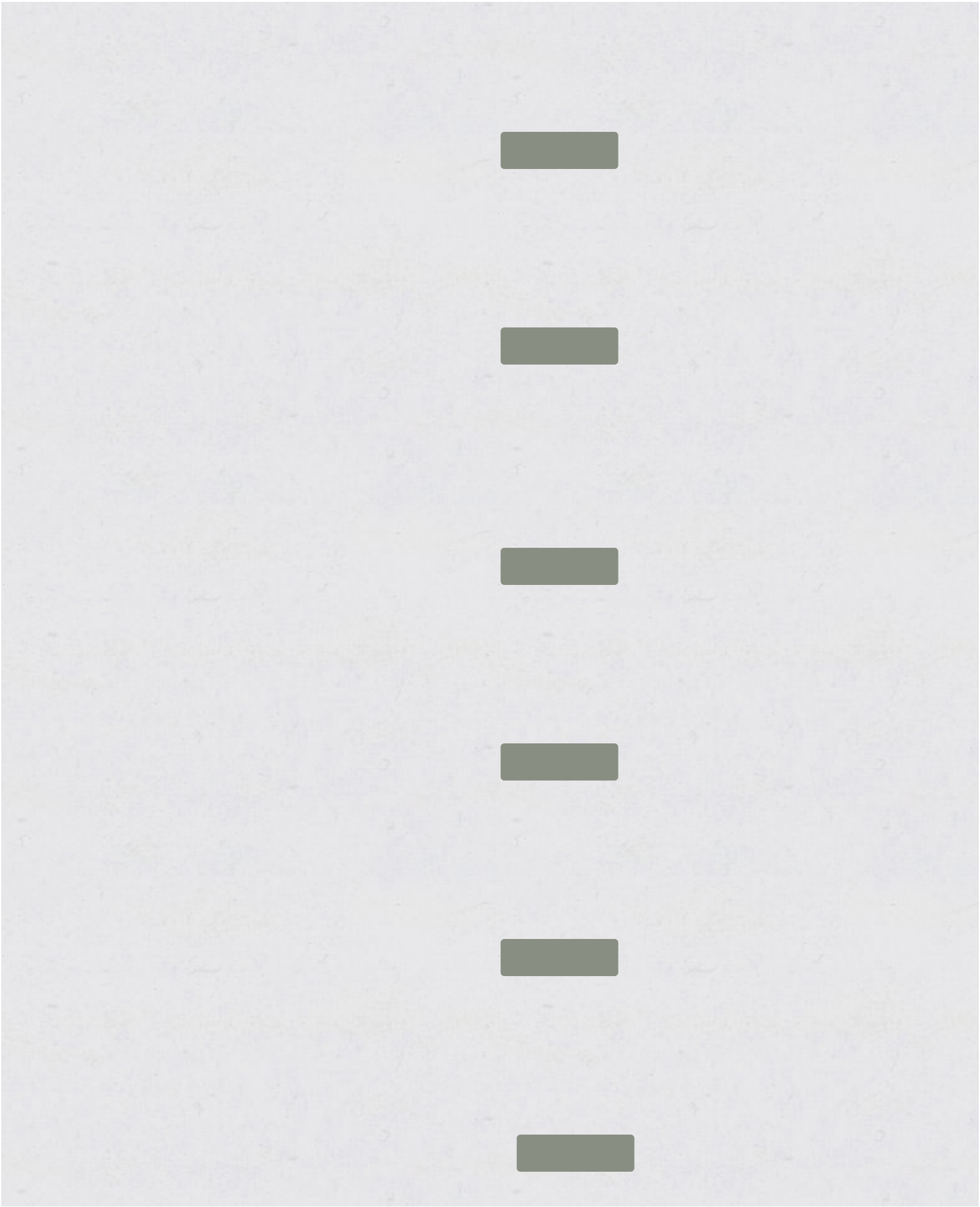
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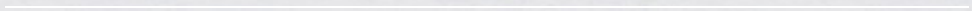
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The complex block contains the University of Maryland logo on the left, which is a circular seal with a red and white checkered pattern and the text 'UNIVERSITY OF MARYLAND' and the years '18' and '56'. To the right of the seal is the text 'University of Maryland', 'College Park, MD', and '20742-4111'. Further right is a stylized 'physics' logo where the 'p' is a yellow grid pattern, followed by 'ysics' in a serif font, and 'University of Maryland' in a smaller red font below it.