

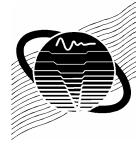
# Modeling Partial Enclosures

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Amy Sandman  
Kirk Fallis  
Ferdinand Martinus  
University of Kentucky

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Vibro-Acoustics Consortium



# Experimental Setup

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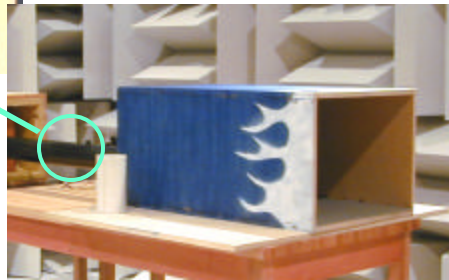
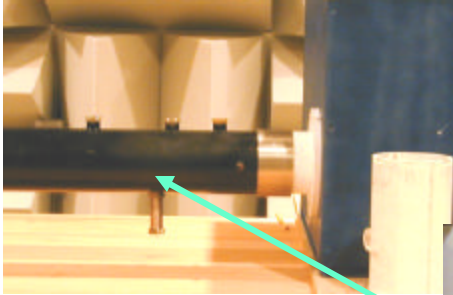


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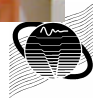
## Experimental Setup



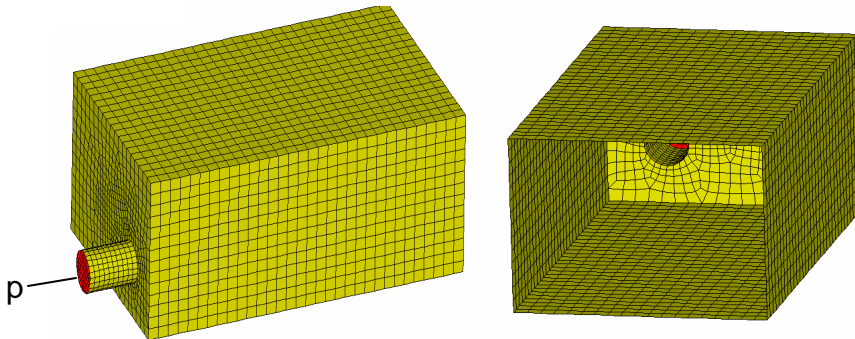
- ❖ 1 m x 0.6 m x 0.4 m
- ❖ 2 cm high-density particle board
- ❖ No absorption inside enclosure

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3

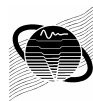


## SYSNOISE Model



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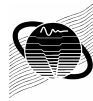
4



# Modification

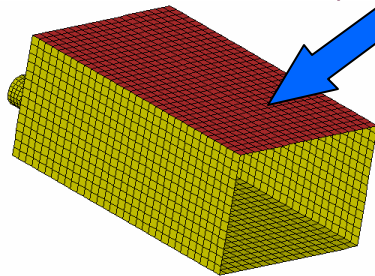


Structural-acoustic coupling



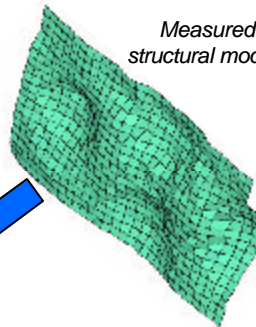
# Structural-Acoustic Coupling

Acoustic BE model



Coupled

Measured structural modes



Interpolated from Coarse Grid

