



JOHNS HOPKINS
WHITING SCHOOL
of ENGINEERING

DEPARTMENT OF CIVIL AND SYSTEMS ENGINEERING

SEMINAR

Barriers and Opportunities in Engineering Disaster-Resilient Housing

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Safe, disaster-resilient housing is critical to our way of life, prosperity and sense of security. Yet, despite decades of advances in technologies for engineering resilient housing, houses remain particularly vulnerable to damage from earthquakes, hurricanes, floods, fires and other hazards, and this loss of housing has long-term community impacts, affecting workforce availability, economic prosperity, and public health, and exacerbating housing shortages. This talk will first explore housing safety challenges in multihazard environments, using probabilistic performance assessments to characterize structural safety. Arguing that how residents perceive housing safety affects how structures are designed, built or maintained, it will also describe work done to characterize households' perceptions of hurricane and earthquake safety. By comparing the structural performance assessments with the household perceptions, it will conclude by exploring how household perceptions of safety align – or misalign – with scientific and engineering knowledge, highlighting opportunities for changing how we design, build and maintain housing structures.

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12 PM

Online

wse.zoom.us/j/93432014600

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