

Thursday, February 23, 2017 | Raytheon Amphitheater | 5:30pm - Reception & 6:30pm - Presentation Proudly hosted by Department of Civil and Environmental Engineering > free and open to public <

EERI DISTINGUISHED SEMINAR:

From Performance-Based Engineering to Earthquake Resilience



Greg Deierlein is the John A. Blume Professor of Engineering at Stanford University where he directs the Blume Earthquake Engineering Center. Deierlein previously served as the deputy director for the Pacific Earthquake Engineering Research (PEER) Center where he managed research to develop performance based earthquake engineering methods and enabling technologies. Deierlein specializes in the design and behavior of structures, nonlinear structural analysis, computational fracture and damage mechanics, and performance-based earthquake engineering. He is a registered

professional engineer and maintains professional activities as a structural engineering consultant and in building code standards development. In 2013, he was elected to the US National Academy of Engineering for his contributions to the use of nonlinear analysis in structural design.

This talk will present how performance-based earthquake engineering has matured over the past twenty years from a conceptual framework into a formal methodology that can enable quantitative assessment of the seismic risks to buildings and infrastructure. Performance-based approaches are facilitating the design of innovative structures and influencing building code requirements and public policies for earthquake safety. This talk will examine the major developments in performance based earthquake engineering and ways it is being applied to reduce earthquake risks and improve earthquake resilience.

Co-Sponsors:

Structural Engineers Association of Massachusetts

Boston Association of Structural Engineers





This event is part of National Engineers Week, for the full schedule please visit coe.neu.edu/new



Greg Deierlein

Director, John A. Blume Earthquake Engineering Center Professor, Civil and Environmental Engineering STANFORD UNIVERSITY

Education

PhD, University of Texas, Austin, 1988
MS, University of California, Berkeley, 1982
BS, Cornell University, 1981

Research Interests

Improving limit states design of constructed facilities through:

- Development and application of nonlinear structural analysis methods.
- Performance based design criteria

Honors and Awards

- Elected, National Academy of Engineering (2013)
- Breakthrough Award, Popular Mechanics (2010)
- Top 25 Newsmakers of 2009, Engineering News Record
- Norman Medal, American Society of Civil Engineers (2008)