

Linbeck Distinguished Lecture Series

in Earthquake Engineering: Challenges of the New Millennium

*Bringing together practitioners and researchers to tackle the challenges
of protecting our nation's infrastructure against seismic hazards*

ALL LECTURES WILL BE WEBCAST LIVE.

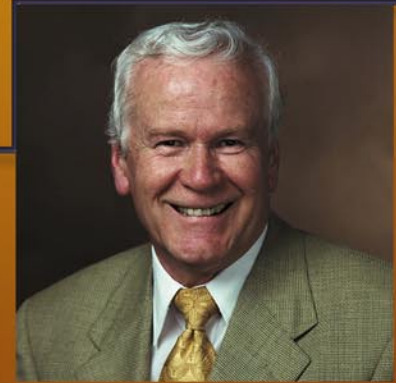
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www.nd.edu/~linbeck

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Progress and Challenges in Performance-based Earthquake Engineering

Tuesday, October 2, 2001

4PM - C100 Hesburgh Center Auditorium

Reception to follow the lecture

Performance-based earthquake engineering (PBEE) implies design, evaluation, and construction of engineered structures whose seismic performance meets the diverse economic and safety needs of owners and society. The Pacific Earthquake Engineering Research (PEER) Center has set the objective to develop procedures, knowledge, and tools that will provide the foundation on which to base the implementation of PBEE in engineering practice. The approach is aimed at improving decision-making about seismic risk by making the choice of performance goals, and the tradeoffs they entail, apparent and transparent. In the approach, decision variables are identified whose quantification, together with an assessment of important uncertainties, will make it feasible to characterize and manage economic and societal risks above and beyond potential loss of life and injuries. The seminar will summarize the methodology that is being developed by PEER researchers, the challenges that have been encountered in formulating this methodology, and the progress that has been made to date.