Institut für Baustatik und Konstruktion

Seminar

An overview of Probabilistic Seismic Hazard Analysis

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Probabilistic Seismic Hazard Analysis (PSHA) is a mathematical approach for determining the potential seismic loading on a structure that is located near one or more sources of earthquakes. It is an important part of seismic assessments, and has been incorporated in building codes throughout the world. For these reasons it may of interest to a variety of researchers working in earthquake engineering and risk analysis.

This seminar will provide an overview of PSHA from an engineering perspective. It will explain the mathematics used for the calculation, how the needed models are developed using a variety of data sources, how the output is incorporated used to produce design tools such as hazard maps and uniform hazard spectra, and how PSHA relates to seismic risk analysis. No previous experience with the approach is assumed.