Special Issue

Seismic Hazard Analysis Using Ground-Motion Models: New Perspectives and Challenges

Message from the Guest Editor

The study of ground-motion models (GMMs), including ground-motion prediction equations (GMPEs) and the attenuation relationship, has developed increasingly since the late 1970s. These ground motion models help predict seismic hazards and can have a large impact on the design of buildings and infrastructures in earthquake□prone regions. One of the major issues in the development of GMMs concerns the reduction of uncertainties, leading reliable models to predict seismic ground motion including both source and site effects. We invite papers dealing with an original way to use these GMMs in seismic hazard analysis or addressing the computation of new GMM able to consider both the complexity of the source mechanism and complex local site effects, including non-linearities or 3D geometries. Empirical, stochastic, or numerical studies are welcome. Studies that are focused on original ground motion parameter estimation are also encouraged, as well as those dealing with relative performance estimation among multiple models.

Guest Editor

Dr. Etienne Bertrand
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Deadline for manuscript submissions

closed (25 May 2022)

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/79743

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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