

Session ID: BCI-6

Title

SEISMIC ANALYSIS OF DAMS AND LEVEES

Convenors

M.A. Hariri-Ardebili ¹, A. De Falco ², G. Mazza ³

Description

The proposed technical session for the World Conference of Earthquake Engineering will focus on the latest developments in seismic analysis and design of dams and levees. This session will cover a broad range of topics related to probabilistic seismic analysis of dams, including ground motion selection, seismic hazard assessment, and developing seismic fragility curves. Additionally, the session will discuss best practices in evaluating the seismic induced damage and failure of dams and levees, as well as calibration of numerical models for seismic analysis. This technical session will also include presentations and discussions on the seismic analysis of concrete dams, embankments, and other hydraulic structures, as well as the dynamic soil-structure interaction effects.

Experts from academia, industry, and government will share their research and experiences related to the seismic analysis of dams and levees. Case studies will be presented to showcase innovative approaches and successful applications of seismic analysis and design techniques. The main goal of this technical session is to advance the state-of-the-art in earthquake engineering of dams and levees and promote the adoption of best practices. The session will facilitate discussions and knowledge-sharing between experts and attendees, and identify future research needs and challenges in this critical area of earthquake engineering.

Invited Speakers

V. Saouma ¹, J. Salamon ⁴, F. Salazar ⁵, R. Malm ⁶, M. Ghaemian ⁷, G. Wang ⁸, J. Mata ⁹, P. Leger ¹⁰

Affiliations

¹ University of Colorado Boulder, Boulder, USA, ² University de Pisa, Pisa, Italy, ³ Italy Committee on Large Dams (ITCOLD), Rome, Italy, ⁴ US Bureau of Reclamation, Denver, USA, ⁵ CIMNE, Madrid, Spain, ⁶ KTH, Stockholm, SWEDEN, ⁷ Sharif University of Tech., Tehran, Iran, Islamic Rep, ⁸ Wuhan University, Wuhan, China, ⁹ LNEC, Lisbon, Portugal, ¹⁰ Polytechnique de Montreal, Montreal, Canada