

IGT-Kolloquium

Thursday, 27 April 2023

Seismic behaviour of tunnels - challenges and opportunities

Prof. Dr. Raul Fuentes, RWTH Aachen University, Germany
9:45 am, ETH Zurich, Hönggerberg, HIL E8

In this presentation we will discuss some of the latest developments on the behaviour of tunnels under seismic loading. In particular we will be focussing on Sprayed Concrete Lining (SCL) tunnels (or NATM). The presentation will include results from shaking table tests and numerical modelling. After these new insights we will conclude the presentation with a research area outlook and other unanswered questions with significant implications in practise for design and tunnel operation.

Raul Fuentes

Before joining RWTH Aachen in October 2020, Raul Fuentes worked as a Professor at the University of Leeds (UK) and the Universitat Politecnica de Valencia (Spain). He was also a Lecturer at University College London (UCL) where he gained his PhD. Previously he worked in industry for companies like Atkins, May Gurney and Arup where he gained substantial experience in the planning, design and delivery of diverse civil engineering projects. He is still actively involved with practice acting as consultant in projects in the areas of instrumentation and monitoring, tunnelling and ground engineering for agencies like the World Bank. He has supervised more than 20 PhD students, contributed to projects attracting funding over 20 million € in his career and works at the Editorial Board of various international journals.