

ABCPhDOPENTalks2022

Prof. **George Vasdravellis**

Novel steel structural systems for multi-hazard mitigation and enhanced resilience

George Vasdravellis is Associate Professor at Heriot-Watt University (UK)

Abstract:

In the first part of this seminar, the development and validation of a seismic-resistant concentrically braced steel frame is presented. The braces are connected in series with energy-dissipating pins made of duplex stainless steel, providing the structure with enhanced seismic resilience by minimising the downtime for the repair process in the aftermath of a strong seismic event.

The second part of the presentation deals with a novel structural system for progressive collapse mitigation in steel buildings under a column loss scenario. A set of structural details is proposed, which significantly enhance the tie force capacity and rotational ductility of industry-standard joints.

Monday, 4th April 2022, H: 10:30

Politecnico di Milano,
Auditorium, via Pascoli 53, Milano

