

**Session ID: IDD-6**

**Title**

NEW PERSPECTIVES IN SEISMIC ISOLATION AND ENERGY DISSIPATION FOR VIBRATION CONTROL OF STRUCTURES

**Convenors**

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**Description**

An effective way of protecting a structure against the devastating effects of earthquakes is to mitigate the seismic demand on the structure itself. To this end, viable solutions have been identified over the past few decades, including the use of passive systems for vibration control based on concepts of base isolation and supplemental damping. It has been shown through research studies and practical applications, that these strategies are effective at protecting non-structural and structural elements in both new and existing structures subject to low-to-high seismic intensity levels. Significant advancements have been made in the last few decades that have contributed to make base isolation and/or energy dissipation systems more reliable, deployable, and capable of maintaining structural functionality. The ongoing pursuit of enhanced solutions, including novel devices, numerical methods, and design procedures, has played a major role towards achieving these goals, and, ultimately, contributing to a more resilient society.

This Technical Session will offer the opportunity to present and discuss new trends and advancements pertaining to the development and implementation of seismic isolation and supplementary energy dissipation strategies in earthquake engineering. Researchers and practitioners involved in this area are welcome to join the session and present their work with contributions related to topic such as (but not limited to) design, analysis, experimental and hybrid methods, and field applications.

**Invited Speakers**

D. Konstantinidis <sup>3</sup>, G. Mosqueda <sup>4</sup>, E. Cavdar <sup>5</sup>, A. Pavese <sup>6</sup>, E. Bruschi <sup>1</sup>, K.L. Ryan <sup>7</sup>, Y. Shi <sup>8</sup>, N. Wierschem <sup>9</sup>, G. Ozdemir <sup>5</sup>, S. Cattaneo <sup>1</sup>

**Affiliations**

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