

**Session ID:** CMS-10

**Title**

BEHAVIOR AND DESIGN OF FLAT SLABS UNDER SEISMIC ACTIONS

**Convenors**

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**Description**

Flat slabs are widely used in many countries because of their economic and functional advantages. Although simple in appearance, a flat slab system presents a complex load bearing behavior, especially in the slab-column connections.

The design of slab-column connections in flat slab structures often poses a big challenge due to the possibility of a punching failure, particularly when located in regions of moderate to high seismicity (such as Southern Europe, west coast of North and South America and Japan), due to the simultaneous action of gravity and earthquake induced stresses, which may lead to sudden and brittle failures. In the seismic behavior of flat slabs there are still many uncertainties in the analysis and design of the slab-column connections.

In the last years a significant amount of research on the seismic behavior of flat slabs structures has been carried out. In this technical session some of the latest research developments will be presented, including experimental research, innovative modelling and design techniques.

**Invited Speakers**

R. Marreiros <sup>1</sup>, M. Baballëku <sup>3</sup>

**Affiliations**

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