



Dipartimento di Strutture per l'Ingegneria e l'Architettura (DiSt)

Nell'ambito delle attività del **Corso di Dottorato in
Ingegneria Strutturale Geotecnica e Rischio Sismico**

martedì 10 dicembre 2019, ore 10:30-11:30

Prof. Mario E. Rodriguez

(National University of Mexico, Mexico City)

terrà un seminario dal titolo

Predicting Moment Strength of Reinforced Concrete Columns and Walls in Earthquake- Resistant Buildings

The probable moment strength (or flexural overstrength, as it is also known) is the theoretical maximum flexural strength that can be calculated for the critical section of a member, with or without axial load, subjected to bending in a given direction. In the ACI 318 of the American Concrete Institute (ACI), this strength is needed to capacity-design beams, columns of special-moment frames, special walls, and columns not designated as part of the seismic-resisting system. Supported on a column and wall database, it is shown that the current method prescribed by ACI 318-19 (2019) to calculate this strength for columns and walls has a clear nonconservative bias and the reasons for this are explained. This presentation describes a very simple, statistically calibrated mechanics model for determining the probable moment strength of rectangular, circular columns, and RC walls. The proposed procedure for computing probable moment strength in RC columns and walls could be incorporated into design provisions and it could be used immediately by design professionals.

Via Claudio, 21 – aula Multimediale, ed. 7, 1° piano

Tutti gli interessati sono invitati a partecipare

L'Organizzatore
Prof. Ing. Andrea Prota

Il Coordinatore del Dottorato
Prof. Ing. Iunio Iervolino