



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

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

Giovedì 31 marzo 2022, ore 9:00-12:00

Dott. Ing. Daniele Losanno

Seminario

Fragility analysis of existing prestressed-concrete bridges in Italy under traffic loads

Even if previous studies investigated seismic fragility of existing bridges, some recent collapse cases set the need to investigate their vulnerability under gravity loads. In this study, the class of simply supported, beam-type, prestressed concrete bridges was considered to carry out a fragility analysis of the most recurrent type of Italian bridges to traffic loads. Traffic load models were defined according to either Italian building code (i.e., Eurocode based) or the new Italian guidelines for existing bridges. Based on the literature and new data collected from real bridges, geometric, material and load variables were defined through probability distributions and regression models. The fragility analysis was carried through a fully automatic procedure implemented in MATLAB. The main output consists of fragility models that might be used by engineers, roadway management companies and decision-makers in large-scale risk assessments of existing highway bridges under code-based traffic loads, as a basis for prioritization of more refined performance evaluations and structural retrofitting programmes.

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Iscrizioni all'indirizzo phd.dist@unina.it

Per accedere al seminario sarà necessario esibire il **Green Pass**
e indossare la **mascherina FFP2** per tutta la sua durata