

Research activities on steel structures at the University of Naples Federico II

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Summary

This seminar deals with the research activities carried out at University of Naples Federico II on steel structures, which cover the following topics: behaviour of members and classification of cross sections, stability of tubular columns, prequalification of beam-to-column joints, design of partial strength connections against seismic and column loss scenarios, riveted connection and retrofit of old connections with FRP, robustness of steel structures, seismic design of steel structures and revision of current EC8, re-centring dual frame systems, seismic upgrading of RC buildings with dissipative steel bracing. All these topics have been addressed within European projects as well as technical committees with the aim to amend the current version of Eurocodes.

Short biography

Mario D'Aniello is an Assistant Professor at Department of Structures for Engineering and Architecture at University of Naples Federico II.

Prof D'Aniello is very active in higher educational activities, giving master classes in the field of structural design, steel structures and seismic design. He is also in the teaching board of the European Erasmus Mundus Master "Sustainable Constructions under Natural Hazards and Catastrophic Events " and was an invited lecturer in an International post-graduate course (e.g. Master de spécialisation en gestion des risques et des catastrophes at University of Liege).

His research interests cover the following fields: seismic response of steel structures, steel joints, seismic retrofitting of existing buildings, historic metallic structures, robustness, and composite materials. Prof. D'Aniello has been involved in more than 12 European research projects and in several national research projects.

Since 2009, Prof D'Aniello actively collaborates with TC13 that is the Technical Committee on Seismic Design of ECCS. Since 2017, he started working within ECCS TC10 (connections) and he was also appointed as Italian member of the Committee CEN/TC 250/SC 3/WG 1-8. He is a member of the Italian Committee UNI/CT 021/SC 03 "Steel Structures and he is also involved as expert for steel structures in the drafting of the first Italian CNR code "Structural Robustness".

Prof D'Aniello has authored an ECCS book on the "Design of steel structures for buildings in seismic areas" and has published more than 180 publications (journal papers, chapters of books and proceedings) in his fields of research. He acted as guest editor and associate editor of different scientific journals and he is also reviewer for several indexed scientific journals.