## Robustness of Infrastructures

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## Abstract

On the forefront of structural engineering mechanics problems today lays the problem of robustness or progressive collapse. The aging of infrastructures and the very high multilevel consequences associated with the phenomenon have raised progressive collapse as one of the most important structural engineering mechanics problems. Progressive collapse can be initiated by numerous sources including construction or design flaws which surpass the common design base of current codes. Triggering events can be extreme events such as earthquakes, hurricanes, floods, abnormal loads not included in the design like gas explosions, vehicle impacts, fire or extreme environmental loads which push the structural system well beyond its strength envelope. In this framework, all infrastructure is vulnerable to progressive collapse at some level. This mini-symposium will bring together the structural engineering industry with academia aiming to provide insights on the actual engineering mechanics of progressive collapse.

**Keywords:** progressive collapse, resilience, stability

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