

Session ID: RES-6

Title

DECISION-SUPPORT TOOLS FOR COMMUNITY RESILIENCE ENHANCEMENT

Convenors

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Description

Infrastructure systems (i.e., education, residential, health, transportation, and utility systems) are increasingly exposed and vulnerable to natural and man-made hazards, including damaging earthquakes, and the impacts of climate change. Various stakeholders, including local authorities of disaster-prone communities, can develop, test and implement optimal resilience-enhancing policies using decision-support tools that account for relevant technical, environmental, socioeconomic, political, and cultural factors driving disaster risk and impacting disaster recovery.

This session will bring together interdisciplinary global researchers, practitioners, and stakeholders with interests in community- and regional-level resilience modelling frameworks. Presentations in this session will cover a wide range of engineering and interdisciplinary models intended to inform resilience-enhancing decisions at community- and regional-levels. Contributions focused on community-resilience challenges in developing countries are especially welcome. Such models may focus on mitigation action plans and policies ('hard'/structural and 'soft', corrective and compensatory, etc.), adaptive infrastructure design, post-disaster recovery quantification management, and improvement to design codes for functional recovery.

Invited Speakers

F. De Luca ³, R. Costa ⁴, H. Mahmoud ⁵, N. Paul ⁶, E.Y. Mentese ⁷, H. Burton ⁸, G. Cremen ¹, S. Giovinazzi ⁹

Affiliations

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