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Acta Mechanica  
Volume 224, Issue 4, April 2013, Pages 691-705

### Towards a seismic worst scenario approach for rocking systems: Analytical and experimental set-up for dynamic response (Review)

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**Abstract**

The paper focuses on the problem of the assessment of the response of structures behaving like rocking rigid blocks with unilateral constraints under dynamic loading. Although the motion of rigid blocks simulated by means of ad hoc built calculus codes shows good agreement between the numerical results and the data recorded in the laboratory tests, the response of such a system is poorly robust, and results can be very different in dependence of a number of factors, thus making final assessment rather uncertain. The developments presented and discussed represent the premise pushing towards the adoption of approaches aimed at searching for the most possible rocking response and eventually based on iterative optimisation procedures. © 2012 Springer-Verlag Wien.

**Indexed keywords**

Dynamic loadings; Number of factors; Numerical results; Optimisation procedures; Rocking response; Rocking systems; Scenario approach; Unilateral constraints

**Engineering controlled terms:** Dynamic loads; Dynamic response

**Engineering main heading:** Loading

ISSN: 0095-9770 CODEN: AMHCA Source Type: Journal Original language: English  
DOI: 10.1007/s00707-012-0787-9 Document Type: Review

Cited by 25 documents

- Stability of evolutionary brittle-tension 2D solids with heterogeneous resistance Baratta, A., Corbi, I., Corbi, O. (2016) Computers and Structures
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April 2013, Volume 224, Issue 4, pp 691-705

## Towards a seismic worst scenario approach for rocking systems: analytical and experimental set-up for dynamic response

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Article  
First Online: 06 December 2012  
DOI: 10.1007/s00707-012-0787-9

Cite this article as:  
Baratta, A., Corbi, I. & Corbi, O. Acta Mech (2013) 224:691. doi:10.1007/s00707-012-0787-9

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