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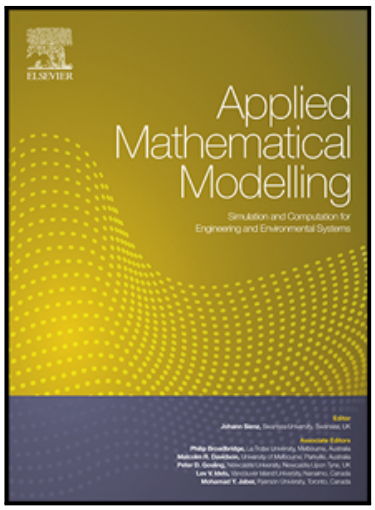


# Relevance of soil-pile tangential tractions for the estimation of kinematic seismic forces: Formulation and setting of a Winkler approach

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**Highlights**

- A BDWF model including the distributed moments produced by the pile rotation and the action of the seismic field is presented
- The performance of the proposed model for computing the pile seismic internal forces is tested against a BE formulation
- The influence of the contact condition between pile and soil on the pile seismic forces is also analysed
- Depending on the contact condition, pile shear forces can be duplicated, while bending moments remain practically unaltered

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