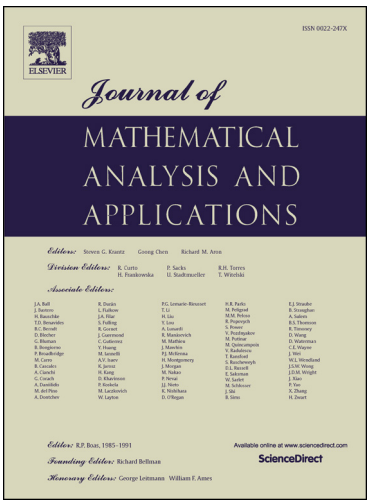
Accepted Manuscript



Variational approach to shape derivatives for elasto-acoustic coupled scattering fields and an application with random interfaces

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PII: S0022-247X(17)30679-0
DOI: http://dx.doi.org/10.1016/j.jmaa.2017.07.016
Reference: YJMAA 21547

To appear in: *Journal of Mathematical Analysis and Applications*

Received date: 19 October 2016

Please cite this article in press as: F. Kang, X. Jiang, Variational approach to shape derivatives for elasto-acoustic coupled scattering fields and an application with random interfaces, *J. Math. Anal. Appl.* (2017), http://dx.doi.org/10.1016/j.jmaa.2017.07.016

Highlights

- Shape derivatives of solutions to elasto-acoustic coupled system are proposed.
- The characterization of shape derivatives is derived for both the differential form and the Euclidean form.
- Shape derivative for stochastic elasto-acoustic equations is firstly studied.
- The variational approach and perturbation characterized by the velocity method are applied.
- Different boundary regularities are discussed.