



## **Acoustic Waves of Tsunami: Inverse Approach**

Bernabe Gomez and Usama Kadri

Cardiff University, School of Mathematics, Mathematics, Cardiff, United Kingdom (gomezperezb@cardiff.ac.uk)

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# **Acoustic Waves of Tsunami: Inverse Approach**

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*School of Mathematics, Cardiff University, Cardiff, CF24 4AG, UK*

Around 60 percent of the World's population is situated in the coast [4] and great part of that area is under risk of Tsunamis, which are often generated by submarine earthquakes with slender rectangular shape. It has been reported that submarine earthquakes might generate acoustic waves beside the Tsunami. Reference [2] showed that for a great distance between the source and the studied point, sound waves are decoupled from gravity waves and can leave measurable bottom pressure signals far from the fault [2]. Therefore, we can study the separately. Due to the fact that acoustic waves travel much faster than gravity waves an early tsunami detection program can be developed. With an inverse approach and bottom pressure signals recorded by several hydrophones, the disturbance parameters and location can be obtained [3,4]. The application of this inverse theory can be extended to other different situations such as tracking fallen objects in the ocean.

## **References**

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