Public Abstract

First Name:Nilesh

Middle Name:Vijay

Last Name:Salvi

Adviser's First Name:Jinglu

Adviser's Last Name:Tan

Co-Adviser's First Name:--

Co-Adviser's Last Name:--

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Title:TIME DELAY COMPENSATION IN FINITE-ORDER MODELS
OF ACOUSTIC WAVE PROPAGATION IN HOMOGENOUS MEDIA

Finite-order linear models allow us to make best use of the linear system approach for solving non-linear problems such as acoustic wave propagation through given media. But these models usually do not sufficiently account for the time delays in wave transmission. This work provides a way to model the sound wave propagation such that the exact time delay produced by the model can be computed. So it becomes possible to estimate required the time delay correction to fit the model with experiment results within acceptable tolerance.