

Thomas Davis

Title of Talk: Optimal Design of a Gaupillaud-Type Layered Media

Abstract:

In this work we identify all the optimal designs that provide the smallest stress amplitude in a three-layered elastic strip subjected to transient loading. We accomplish this by using explicit formulas for the stress, previously obtained using the method of characteristics.

We then demonstrate that the derived analytical results are successfully supported by computational experiments using Maple and Matlab software. We conclude by making comparative observations with the previously obtained results for the two-layer case.