

Model of Cosserat Continuum Dispersion in a Half-Space with a Scatterer

Authors : Francisco Velez, Juan David Gomez

Abstract : Dispersion effects on the Scattering for a semicircular canyon in a micropolar continuum are analyzed, by using a computational finite element scheme. The presence of microrotational waves and the dispersive SV waves affects the propagation of elastic waves. Here, a contrast with the classic model is presented, and the dependence with the micropolar parameters is studied.

Keywords : scattering, semicircular canyon, wave dispersion, micropolar medium, FEM modeling

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