Heymsfield, Ernest

Infinite domain correction for anti-plane shear waves in a two-dimensional boundary element analysis. (English) Zbl 0888.73070

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This paper discusses absorbing boundary conditions for artificial finite boundaries required in some finite element or finite difference calculations of wave propagation. The method described relies on some simplifying assumptions and on a boundary integral formulation in two dimensions. Comparisons are made between exact, not corrected, and corrected solutions.

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MSC:

74S15 Boundary element methods applied to problems in solid mechanics
74L10 Soil and rock mechanics
74J10 Bulk waves in solid mechanics
86A15 Seismology (including tsunami modeling), earthquakes

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