

# On the Rayleigh wave speed in orthotropic elastic solids

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**Abstract:** Recently, a formula for the Rayleigh wave speed in an isotropic elastic half-space has been given by Malischewsky and a detailed derivation given by the present authors. This study deals with the generalization of this formula to orthotropic elastic materials and Malischewsky's formula is recovered as a special case. The formula is obtained using the theory of cubic equations and is expressed as a continuous function of three dimensionless material parameters. ?? Springer 2005.

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