

## **On the Determination of Green's Tensor for a Micropolar Elastic Medium and Application to Wave Propagation in Random Media**

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The equation  $L V = f$  where  $L$  is the linear differential operator involving randomly variable field parameters,  $V$  the field vector and  $f$  the source term, is considered. An integro-differential equation governing the mean field quantity ' $V$ ' is derivable by use of smooth perturbation technique. The kernel of the deterministic operator equation is the Green's tensor. The Green's tensor appropriate to the field equations representing a micropolar elastic medium is evaluated in the form of Fourier integrals. The exact evaluation of the integrals is carried out to obtain 36 components of the Green's tensor. The problem of wave propagation in a random micropolar elastic medium can now be examined with the help of the Green's tensor.