# On investigation of the Green-Lindsay three-dimensional model

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In the present paper we consider the Green and Lindsay nonclassical three-dimensional model [1] for inhomogeneous anisotropic thermoelastic bodies with two relaxation times, which depend on space variables. We obtain a variational formulation for the initial-boundary value problem corresponding to the Green-Lindsay model. On the basis of the variational formulation we define the spaces of vector-valued distributions corresponding to the initial-boundary value problem and by applying suitable a-priori estimates we prove the existence and uniqueness of the solution, an energy equality, and the continuous dependence of the solution on given data.

# References

[1] A.E. Green and K.A. Lindsay, Thermoelasticity, J. Elasticity, **2** (1972), 1-7.