# Thermal Shock Magneto-Thermoelasticity Stressed Considering Two Temperatures and LS Model

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## Abstract

The present investigation is intended to demonstrate the magnetic field, relaxation time, hydrostatic initial stress, and two temperatures on the thermal shock problem. The governing equations are formulated in the context of the Lord-Shulman theory with the presence of body force, two temperatures, thermal shock, and hydrostatic initial stress. We obtained the exact solution using the normal mode technique with appropriate boundary conditions. The field quantities were calculated analytically and displayed graphically under the thermal shock problem with the effect of external parameters with respect to space coordinates. The results obtained are in agreement with the previous results obtained by others when the new parameters vanish.

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