

# **Rayleigh Taylor instability in a visco-elastic medium using Generalized Hydrodynamic model**

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For Newtonian fluids the Rayleigh-Taylor instability arises when a heavier fluid is supported by lighter fluid under the effect of gravitational force. We use Generalized Hydrodynamic fluid model for a visco -elastic medium like a strongly strongly coupled incompressible dusty medium. It is demonstrated that the visco-elasticity of the strongly coupled medium leads to a suppression of the Rayleigh Taylor instability. A detailed numerical simulation studies have been carried out to elucidate this effect.