

## **THE EVOLUTION OF LINEARIZED PERTURBATIONS IN A BAROCLINIC STRATIFIED COUETTE FLOW**

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### **Abstract**

The evolution of linearized perturbations in a stratified shear flow is studied using the initial value problem approach. The resulting equation in time posed by using Fourier transform is solved for the Fourier amplitudes for baroclinic stratified Couette flow with a point source of the field of transverse velocity and density as initial distributions. Perturbation solutions are obtained for small values of Brunt Väisälä frequency. The velocity and density plots are drawn for different values of Brunt Väisälä frequency.