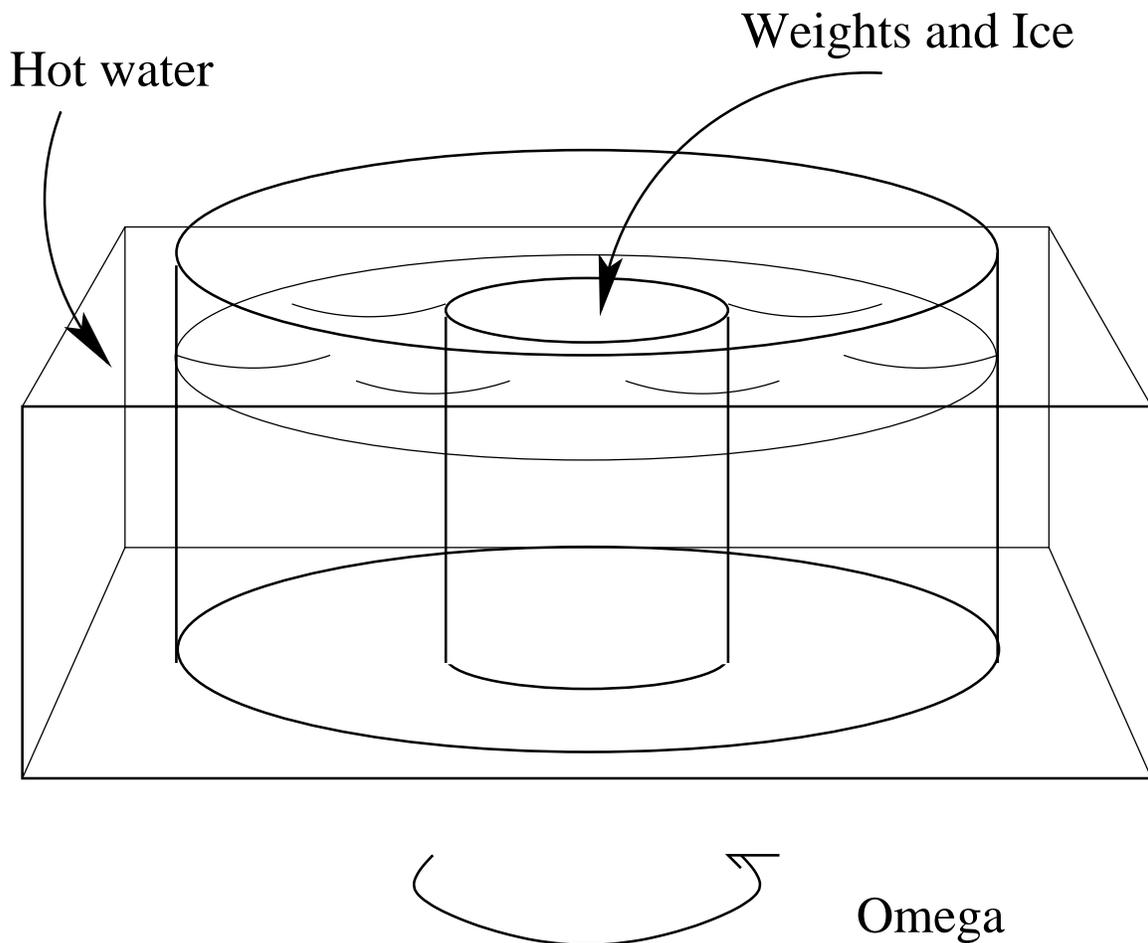


12.804 — Baroclinic Instability — Tank Experiment

Setup

You can generate a baroclinic circulation in the rotating tank with a setup like



Use thermistors to measure temperatures at various points in the flow and dye or permanganate crystals to visualize the flow.

As the rotation rate increases, you should be able to move from a Hadley regime to waves to a more turbulent flow. See if you can find the transition points, and explain what's going on.