**12.804 — Vortices in the lab**

**Setup**

You can make vortices by forcing fluid into a rotating tank — the setup is shown here (c.f., Flierl, Stern, and Whitehead (1983), *Dyn. Atmos. and Oceans*, 7 233-263).

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**Sketch of apparatus**

After the tank is spun up, you pour on the order of 75 ml of dyed water into the funnel. You will generally get three vortices: one dipole with unequal partners and another individual vortex.

**Things to do:**

- Follow the motion of the dipole, measure the circulations of the individual vortices, and compare to model such as point vortices.
- How do the vortices depend on the amount of fluid injected?
- Study the collisions of the dipoles with the wall.
- Try to generate several vortices and see if you can observe merger.
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