

Abstract for an Invited Paper
for the MAR06 Meeting of
The American Physical Society

Rotating Superfluids

RUSSELL DONNELLY, University of Oregon

Rotation of a fluid, particularly studying phenomena affected by Coriolis forces, plays a significant role in nearly all branches of fluid dynamics. Quantum fluids are no exception, as evidenced by remarkable devices such as “Rota” in Helsinki. This talk concerns the early days of rotating superfluids, starting long before superfluid helium-3 appeared on the scene. I will attempt to describe some of the early experiments, how the apparatus was designed, and what the experiments revealed. There has been so much activity in this area, I will discuss mostly experiments in my own fields of interest. Time will not permit an exhaustive review of this fascinating subject.