

ATS/CIRA Colloquium

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Understanding Ocean General Circulation using the CSU Spin Tank

August 30, 2007

ATS room 101; Discussion will begin at 3:30pm

Refreshments will be served at 3:00pm in the coffee lounge

We use the CSU spin tank as an illustrative tool to discuss underlying fluid dynamics for the large-scale ocean circulation, in particular, wind-driven gyres and abyssal circulation. Through the group study course, a group of graduate students designed, built and tested new laboratory experiments highlighting the role of surface wind stress, interior mass sources and sphericity of the rotating planet (beta effect). We will demonstrate and discuss how these mechanisms work together to produce the observed features of ocean general circulation in the laboratory scale.