



PhD position in Ocean Dynamics

We are seeking a highly motivated PhD student to join the Turbulence and Complex Flow group at the Department of Mechanical Engineering, University of Rochester. More information about the group can be found at <http://www.me.rochester.edu/~haluie/>

The position is highly interdisciplinary and involves research in Turbulence and nonlinear multi-scale science, Geophysical Fluid Dynamics, and Ocean Science. Large-scale currents, eddies, and waves pervade the Ocean and play a prime role in the general circulation and climate. The coupling between scales ranging from $O(10^4)$ km down to the $O(1)$ mm scale presents a major difficulty in understanding, modeling, and predicting oceanic circulation and mixing. The general aim of the project is to better understand nonlinear processes taking place in oceanic flows, such as the interaction between the Gulf Stream and mesoscale eddies, and processes that power the large-scale meridional overturning circulation. The research will further develop, implement, and utilize novel techniques to probe Oceanic flow data from numerical models and from satellites. The project is a collaboration among Prof. Hussein Aluie (U of R), Dr. Mahmoud Sadek (U of R), Dr. Matthew Hecht (Los Alamos National Lab, LANL), and Prof. Geoff Vallis (U of Exeter).

We welcome applications from candidates with a background in engineering, physics, applied math, or related disciplines with a strong interest in fluid dynamics. Proficiency in programming is required. Previous experience in scientific computing is highly desirable.

**** Application Deadline ****

January 1, 2017.

Formal applications should be submitted through the ME department's website:

<http://www.me.rochester.edu/graduate/admissions.html>

Potential candidates are encouraged to contact Hussein Aluie (hussein**At*rochester.edu) with inquiries and to express their interest in the position. Please attach a CV.