



Fellowships in Geophysical Fluid Dynamics

at
Woods Hole Oceanographic Institution

June 14 to August 19, 2021

Since 1959 the GFD program has promoted an exchange of ideas among researchers in the many distinct fields that share a common interest in the nonlinear dynamics of fluid flows in oceanography, meteorology, geophysics, astrophysics, applied mathematics, engineering and physics. Each year, the program is organized around a ten-week course of study and research for a small group of competitively selected graduate-student fellows. The overall philosophy is to bring together researchers from a variety of backgrounds to provide a vigorous discussion of concepts that span different disciplines, and thereby to create an intense research experience. For the student fellows, the centerpiece of the program is a research project, pursued under the supervision of the staff. At the end of the program, each fellow presents a lecture and a written report for the GFD proceedings volume. Over its history, the GFD Program has produced numerous alumni, many of whom are prominent scientists at universities throughout the world. The interdisciplinary atmosphere of the Program is the ideal place for young scientists to learn the habits of broad inquiry, of speaking to others with very different backgrounds and viewpoints, and of seeking answers in unfamiliar places.

The Program commences with two weeks of Principal Lectures focusing on a particular theme in GFD. For 2021, the theme is "**Multiscale GFD and the Ocean Submesoscale**" and the lecturers will be **Keith Julien** (University of Colorado, Boulder), who will focus on new asymptotic formulations for capturing dynamical interactions involving turbulent small-scale processes, and **Oliver Buhler** (New York University), who will discuss submesoscale interactions between waves and balanced flows. A multi-day workshop on submesoscale oceanography, arranged by **Raffaele Ferrari** (MIT), is also being planned.

Up to ten competitive fellowships are available for graduate students. Successful applicants will receive stipends of \$7,793. Planning will allow for the Program to be held in-person or fully remotely, recognizing the uncertainties caused by the pandemic. If in-person, an allowance for travel expenses within the United States will be included. Whether in-person or remote, fellows are expected to participate full-time (40 hours per week) for the full ten weeks of the Program. The application deadline is February 15, 2021. Awards will be announced by April 1, 2021. We seek applicants from all areas of Geophysical Fluid Dynamics, and particularly encourage applications from women and members of underrepresented groups. Further information and application forms may be obtained at <https://gfd.whoi.edu> or by writing to: gfd@whoi.edu

*Prospective visitors should contact Greg Chini at greg.chini@unh.edu or
Eric Chassignet at echassignet@fsu.edu*