UNIVERSITY OF MARYLAND

DEPARTMENT OF ATMOSPHERIC AND OCEANIC SCIENCE

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Postdoctoral Associate: Submesoscale instabilities in the ocean bottom boundary layer

Position Summary:
The University of Maryland Department of Atmospheric and Oceanic Science is seeking a postdoctoral researcher to study the dynamics of submesoscale processes in the ocean bottom boundary layer. The postdoctoral researcher will use Large-Eddy Simulations (LES) and theory to explain how submesoscale instabilities affect the energetics, and turbulent properties, of flow along topography. A background in physical oceanography is required, with preference given to candidates with strong experience in ocean dynamics and numerical modeling. The position will be located at the University of Maryland, College Park, working with Dr. Jacob Wenegrat, with significant opportunities for collaboration with Dr. John Taylor at the University of Cambridge.

Minimum Qualifications:
- PhD in physical oceanography, fluid dynamics, or other related subject by start date
- Experience with ocean dynamics and numerical modeling
- Excellent written and oral communication skills
- Proficiency in Python, Matlab, or other data analysis software
- Ability to pursue research both independently and as part of a team

Preferred Qualifications:
- Experience with LES and/or ROMS
- Proficiency with high-performance computing
- Prior research focus on submesoscale dynamics is a plus

Duties and Responsibilities:
- Configure, run, and analyze numerical simulations of the ocean bottom boundary layer
- Develop theory to explain how submesoscale processes modify the energetics of flow over topography
- Publish in peer-reviewed journals and present work at national and international conferences and seminars

Timeline and application:
The initial appointment will be for a 12 month period, with the possibility of renewal for an additional 12 months subject to satisfactory performance and availability of funding. The position can begin as soon as June 2020, and no later than December 2020.

To apply please submit a cover letter (explaining interest and relevant qualifications), CV (including list of publications), and contact information for 3 references through https://ejobs.umd.edu/postings/76164. Only references for shortlisted candidates will be contacted. Review of applications will begin immediately, however for full consideration please apply before February 14, 2020.

Please visit http://wenegrat.github.io/ for more information, and questions about the position may be directed to Jacob Wenegrat (wenegrat@umd.edu).