

# Henri F. Drake

Graduate Student, MIT / WHOI joint program in Physical Oceanography

## Education

- 2016–present **Doctor of Philosophy**, MIT/ WHOI Joint Program in Oceanography.  
Physical Oceanography
- 2014 **Study Abroad**, Lund University, Sweden.  
Mathematics
- 2011–2015 **Bachelor of Science**, Haverford College, Magna Cum Laude.  
Mathematics

## Research

- 2016–present **MIT / WHOI Joint Program in Oceanography**.  
Research Assistant (Physical Oceanography)
- 2015–2016 **Princeton University**.  
Research Assistant (Physical Oceanography)
- 2014–2015 **Haverford College**.  
Research Assistant (Knot Theory)
- 2013 **University of Southern California**.  
Research Assistant (Quantum Computing)
- 2012 **Clarkson University**.  
Research Assistant (Environmental Sensor Development)

## Publications

- Submitted **Spiraling up: pathways of global deep water to the surface of the Southern Ocean**, Tamsitt, V., **Drake, H. F.**, Morrison, A. K., Talley, L. D., Dufour, C. A., Gray, A. R., Griffies, S. M., Mazloff, M. R., Sarmiento, J. L., Wang, J., Weijer, W., Under review for *Nature Communications*.
- Submitted **Spiraling up: pathways of global deep water to the surface of the Southern Ocean**, van Sebille, E., Griffies, S. M., Abernathey, R., Adams, T. P., Berloff, P., Biastoch, A., Blanke, B., Chassignet, E. P., Yu Cheng, Y., Cotter, C. J., Deleersnijder, E., Döös, K., **Drake, H. F.**, Drijfhout, S., Gary, S. F., Heemink, A. W., Kjellsson, J., Koszalka, I. M., Lange, M., Lique, C., MacGilchrist, G. A., Marsh, R., Adame, C. G. M., McAdam, R., Nencioli, F., Paris, C. B., Piggott, M. D., Polton, J. A., Rühls, S., Shah, S. H. A. M., Thomas, M. D., Wang, J., Wolfram, P. J., Zanna, L., Zika, J. D., Under review for *Ocean Modelling*.
- In prep. **Lagrangian timescales of Southern Ocean upwelling in a hierarchy of model resolutions**, **Drake, H. F.**, Morrison, A. K., Griffies, S. M., Sarmiento, J. L., Weijer, W., Gray, A. R..

## Awards

- 2016-2017 **Rosenblith Presidential Fellowship Program**, *Massachusetts Institute of Technology*.  
Graduate fellowship
- 2016 **Graduate Research Fellowship Program**, *National Science Foundation*.  
Honorable mention
- 2015 **Haverford College**.  
Honors thesis
- 2013 **Howard Hughes Medical Institute**.  
Summer research fellowship
- 2012 **Research Experience for Undergraduates (REU)**, *National Science Foundation*.  
Summer fellowship

## Conference Presentations

- 2016 **Southern Ocean Carbon and Climate Observations and Modeling (SOCCOM) Annual Meeting (Year 2)**, *La Jolla, CA*, Co-presented with Veronica Tamsitt, 05/10.  
"3-D Pathways of Deep Water Upwelling"
- 2016 **Ocean Sciences 2016: "Past, Present, Future Climate"**, *New Orleans, LA*, 02/22.  
"Lagrangian Upwelling Pathways of Deep Waters in the Southern Ocean"

## Seminar Presentations

- 2016 **Princeton University - Ocean Biogeochemistry spring seminar series**, *Princeton, NJ*, 02/05.  
"The Lagrangian Deep Water Upwelling Pathways in the Southern Ocean"
- 2016 **Southern Ocean Carbon and Climate Observations and Modeling (SOCCOM) graduate student and post-doc webinar series**, *Princeton, NJ*, 06/21.  
"3D Visualization and Animation in Python"
- 2016 **Princeton University - Atmospheric and Oceanic Sciences student and post-doc seminar series**, *Princeton, NJ*, 06/27.  
"Modelling Lagrangian upwelling pathways of deep waters in the Southern Ocean"

## Workshops

- 2015 **Workshop on the Future of Lagrangian Ocean Modelling**, *London, UK*, 10/23-10/25.

## Teaching

- 2015 **Teaching assistant at Math Question Center**, *Haverford College*.
- 2012-2013 **Peer Tutor in Mathematics and Physics**, *Haverford College*.