Anna C. Savage

CONTACT INFORMATION

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RESEARCH INTERESTS

Internal gravity waves, internal tides, ocean mixing, geophysical fluid dynamics, and tidal aliasing in satellite altimetry

EDUCATION

University of Michigan, Ann Arbor, MI
Ph.D., Applied Physics Program, Advisor: Brian Arbic — 2011-2017

Kalamazoo College, Kalamazoo, MI
B.A., Physics Major with Applied Math and Studio Art Minors
Thesis: Analysis of chaotic network dynamics to determine the physical connectivity within neuronal networks–honors — 2007-2011

Université de Strasbourg, Strasbourg, France
Study Abroad — 2009-2010

RESEARCH AND FIELD EXPERIENCE

- **Post-doctoral research fellow (current)**
  Co-advised by Jen MacKinnon, Amy Waterhouse, Sam Kelly
  Scripps Institution of Oceanography, San Diego, CA — 2017-present
- **NASA Earth and Space Science Fellowship**
  Graduate research fellow with Brian Arbic
  University of Michigan, Ann Arbor, MI — 2016-2017
- **Gulf of Mexico Cruise** (R/V Pelican): associated with Consortium for Coastal and River-Dominated Ecosystems (CONCORDE), river plume surveys, wind-driven mixing, tidal-driven mixing — April 2016
- **Equatorial Pacific Cruise** (R/V Oceanus): tropical instability waves, Equatorial undercurrent, hydrothermic ventilation, Equatorial cold tongue — November 2014
- **NSF Research Experience for Undergraduates**
  Biophysics Department
  University of Michigan, Ann Arbor, MI — Summer 2010

PUBLICATIONS

- **Savage, A. C.**, B. K. Arbic, J. G. Richman, J. F. Shriver, M. H. Alford, M. C. Buijsman, J. T. Farrar, H. Sharma, G. Voet, A. J. Wallcraft, and L. Zamudio (2017), Frequency content of sea surface height variability from internal gravity waves to mesoscale eddies, *J. Geophys. Res. Oceans*, *122*, doi:10.1002/2016JC012331.
- **Savage, A. C.**, B. K. Arbic, M. H. Alford, J. K. Ansong, J. T. Farrar, D. Menemenlis, A. K. O'Rourke, J. G. Richman, J. F. Shriver, G. Voet, A. J. Wallcraft, and L. Zamudio (accepted), Spectral decomposition of internal gravity wave sea surface height in global models, *J. Geophys. Res. Oceans*, doi:10.1002/2017JC013009.

Posters and Presentations

- Sea surface signatures of internal gravity waves
  CASPO Seminar, Scripps Institution of Oceanography, San Diego, CA — March 2017
- Sea surface height variability from internal gravity waves to mesoscale eddies and effects on satellite altimetry.
  Physical Oceanography Dissertation Symposium, Honolulu, HI — October 2016
- Sea surface height signatures of internal gravity waves
  POA Seminar, Oregon State University, Corvallis, OR — October 2016
- Internal gravity wave contributions to sea-surface variability.
  AGU Ocean Sciences Meeting, New Orleans, LA — February 2016
- Wavenumber Spectral Exercises with HYCOM and the SWOT Ocean Simulator.
  SWOT Science Definition Team Meeting, Toulouse, France — July 2015
- High Frequency Tests in the Surface Water and Ocean Topography (SWOT) Ocean Simulator.
  SWOT Science Definition Team Meeting, La Jolla, California — January 2015
- Analysis of tidal aliasing using tide gauges and an eddying global ocean model with embedded tides (poster).
  AGU Ocean Sciences Meeting, Honolulu, HI — February 2014
- Comparison of sea surface height in tide gauges and high-resolution ocean simulations with embedded tides.
  Layered Ocean Model Meeting, Ann Arbor, MI — June 2013

Teaching and Outreach

- Graduate Student Instructor
  University of Michigan Physics Department
  University of Michigan, Ann Arbor, MI — Winter 2016
- Organizing committee member
  APS Conference for Undergraduate Women in Physics
  University of Michigan, Ann Arbor, MI — January 2015
- Lead organizer for Society for Women in Physics Demo Day
  Slauson Middle School, Ann Arbor, MI — February 2014
- Calculus and physics teaching assistant
  Mathematics and Physics Departments
  Kalamazoo College, Kalamazoo, MI — 2008-2011
- Student community organizer
  Vine Neighborhood Association
  Kalamazoo, MI — Spring 2008