Peng Wang, Ph.D.

Email: wangpeng@miami.edu **Website:** https://wangpengphd.github.io
Address: 4600 Rickenbacker Causeway, Ocean Sciences Dept., Miami, FL 33149, USA

Education

- Ph.D. in Meteorology and Physical Oceanography 2011 – 2016
  University of Miami, Miami, Florida, USA

- B.S. in Ocean Sciences 2007 – 2011
  Ocean University of China, Qingdao, Shandong, China

Careers

- Postdoctoral Research Associate, University of Miami, USA 2016 – Present

Professional Experiences

- Research Assistant at University of Miami Aug. 2011 – May 2016
- Teaching Assistant of *Geophysical Fluid Dynamics* Oct. 2015 – Nov. 2015
- Teaching Assistant of *Computer Models of Fluid Dynamics* Aug. 2013 – Dec. 2013
- Teaching Assistant of *Introduction to Physical Oceanography* Jan. 2013 – May 2013
- Research cruises nearshore Florida southeast coast Jul. and Sep. 2014
- Visiting Student at the summer school of *Fluid Dynamics on Sustainability and the Environment* at École Polytechnique, France Sep. 2015

Professional Skills

Fortran; MATLAB; Nek5000; VisIt; ParaView; HTML; Linux/Unix

Professional Affiliations

American Geophysical Union

Awards and Honors

- Doctoral Student Scholarship at University of Miami, USA 2011 – 2016
- Outstanding Student at Ocean University of China 2009 – 2010
- Excellent Students Scholarship at Ocean University of China 2009 – 2010
- Excellent Academy Scholarship at Ocean University of China 2008 – 2010
- First Prize of National Undergrad Marine Knowledge Contest, China 2008
- Second Prize of National Undergrad Mathematics Contest, Shandong, China 2009

Voluntary Services

- Volunteer for *National Gandhi Day of Service* Oct. 2015
- Volunteer for UM/RSMAS Student Auction Mar. 2015
- Volunteer for *Baynanza Beach Cleanup and Exotic Plant Removal* Apr. 2014
- Member of UM/RSMAS MPO Student Seminar Committee Sep. 2013 – May 2014
- Member of UM/RSMAS Garden Club Jan. 2013 – Mar. 2016

Publications

Peer-reviewed Articles:

- **Wang, P.**, Özgökmen, T. M., 2017. Langmuir circulation with explicit surface waves from moving-mesh modelling. Submitted to *Geophysical Research Letters*.

- **Wang, P.**, Özgökmen, T. M., Haza, A. C., 2016. Material dispersion by oceanic internal waves. *Environmental Fluid Mechanics*, DOI: doi:10.1007/s10652-016-9491-y.

- **Wang, P.**, Özgökmen, T. M., 2016. Spiral inertial waves radiated from geophysical vortices. *Ocean Modelling*, DOI: 10.1016/j.ocemod.2016.01.001.

- **Wang, P.**, Özgökmen, T. M., 2015. How do hydrodynamic instabilities affect 3D transport in geophysical vortices? *Ocean Modelling*, DOI:10.1016/j.ocemod.2015.01.002.

- Rypina, I., Pratt, L. J., **Wang, P.**, Özgökmen, T. M., Mezić, I., 2015. Resonance phenomena in 3D time-dependent volume-preserving flows with symmetries. *Chaos*, DOI: 10.1063/1.4916086.

- Pratt, L. J., Rypina, I. I., Özgökmen, T. M., **Wang, P.**, Childs, H., Bebieva, Y., 2014. Chaotic advection in a steady, three-dimensional, Ekman-driven eddy. *Journal of Fluid Mechanics*, DOI:10.1017/jfm.2013.583.

Conference Papers:

- Zambianchi, E., Poulain, P., **Wang, P.**, Kalampokis, A., Berta, M., Borghini, M., Buonocore, B., Cianelli, D., Falco, P., Gerin, R., Iermano, I., Mantovani, C., Nicolaides, G., Özgökmen, T., Sofianos, S., Uttieri, M., Zervakis, V., 2013. Surface circulation in the Gulf of Naples during the GELaTo 2012 experiment. *40th CIESM Congress – Marseille, France, October 2013.*

Ph.D. Dissertation:

- **Wang, P.**, 2016. Material dispersion by ocean eddies and waves. *Open Access Dissertations*, Paper 1653.

Conferences and Presentations

- International Forum of Ocean Sciences for Outstanding Overseas Young Scholars
  --- Shanghai, China; June 2017
  Oral presentation: "Material transport within unstable eddies and Langmuir circulation"

- Consortium for Advanced Research on Transport of Hydrocarbon in the Environment
  --- Miami, FL, USA; November 2016
  Oral presentation: "Simulating Langmuir circulations without phase averaging surface gravity waves"

- AmeriMech Symposium on Fluid Transport and Nonlinear Dynamics
  --- Woods Hole, MA, USA; May 2016
  Poster presentation: "Spiral inertial waves emitted from geophysical vortices"

- AGU Ocean Sciences Meeting
  --- New Orleans, LA, USA; February 2016
  Poster presentation: "Spiral inertial waves emitted from geophysical vortices"

- Dynamical Systems Theory and Lagrangian Data Assimilation in 3D+1 Geophysical Fluid Dynamics
  --- La Jolla, CA, USA; September 2015
  Oral presentation: "Spiral inertial waves emitted from geophysical vortices"

- American Geophysical Union Fall Meeting
  --- San Francisco, CA, USA; December 2014
  Poster presentation: "How do hydrodynamic instabilities affect 3D transport in geophysical vortices"

- Dynamical Systems Theory and Lagrangian Data Assimilation in 3D+1 Geophysical Fluid Dynamics
  --- Miami, FL, USA; November 2014
  Oral presentation: "The material transport and wave radiation in a 3D ocean eddy"

- Consortium for Advanced Research on Transport of Hydrocarbon in the Environment
  --- Hollywood, FL, USA; April 2014
  Oral presentation: "3D instability in an isolated geophysical vortex"

- Dynamical Systems Theory and Lagrangian Data Assimilation in 3D+1 Geophysical Fluid Dynamics
  --- Chapel Hill, NC, USA; February 2013
  Oral presentation: "Chaotic advection a periodically-perturbed, three-dimensional rotating cylinder"

- Lagrangian Analysis and Prediction of Coastal and Ocean Dynamics
  --- Miami, FL, USA; June 2012