**Peng Wang, Ph.D.**

**Email:** [wangpeng@miami.edu](mailto:wangpeng@miami.edu)

**Phone:** (+1) 786.266.3320

**Web:** [https://wangpengphd.github.io](https://wangpengphd.github.io/)

**Address:** 4600 Rickenbacker Causeway, Ocean Sciences Dept., Miami, FL 33149

**Education**

09/2011 – 05/2016 Ph.D. in Meteorology and Physical Oceanography

University of Miami, Miami, USA

09/2007 – 06/2011 B.S. in Ocean Sciences

Ocean University of China, Qingdao, China

**Career**

06/2016 – Present Postdoctoral Associate, University of Miami

**Research Interests**

* *Ocean dynamics:* instabilities of ocean mesoscale and submesoscale eddies, mixed layer instabilities, internal waves, inertial waves, wave-current interaction, Langmuir circulations, etc.
* *Material dispersion:* through ocean eddies, currents, waves, etc.; Lagrangian coherent structures (e.g. FTLE, FSLE).

**Publications**

*Peer-reviewed Articles:*

* **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](http://link.springer.com/article/10.1007%2Fs10652-016-9491-y).
* **Wang, P.**, Özgökmen, T. M., 2016. Spiral inertial waves radiated from geophysical vortices. *Ocean Modelling*, [DOI: 10.1016/j.ocemod.2016.01.001](http://dx.doi.org/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](http://dx.doi.org/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](http://dx.doi.org/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](http://dx.doi.org/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](http://scholarlyrepository.miami.edu/oa_dissertations/1653/).

**Conferences and Presentations**

* 11/2016, Miami, FL, USA. Consortium for Advanced Research on Transport of Hydrocarbon in the Environment (CARTHE-II All Hands Meeting).

--- *Oral presentation*: “Simulating Langmuir circulations without phase averaging

surface gravity waves”.

* 05/2016, Woods Hole, MA, USA. AmeriMech Symposium on Fluid Transport and Nonlinear Dynamics.

--- Poster presentation: “Spiral inertial waves emitted from geophysical vortices”.

* 02/2016, New Orleans, LA, USA. Ocean Sciences Meeting (AGU).

--- Poster presentation: “Spiral inertial waves emitted from geophysical vortices”.

* 09/2015, La Jolla, CA, USA. Dynamical Systems Theory and Lagrangian Data Assimilation in 3D+1 Geophysical Fluid Dynamics (MURI Ocean 3D+1).

--- *Oral presentation*: “Spiral inertial waves emitted from geophysical vortices”.

* 12/2014, San Francisco, CA, USA. American Geophysical Union Fall Meeting (AGU Fall Meeting).

--- *Poster presentation*: “How do hydrodynamic instabilities affect 3D transport in geophysical vortices”.

* 11/2014, Miami, FL, USA. Dynamical Systems Theory and Lagrangian Data Assimilation in 3D+1 Geophysical Fluid Dynamics (Ocean 3D+1).

--- *Oral presentation*: “The material transport and wave radiation in a 3D ocean eddy”.

* 04/2014, Hollywood, FL, USA. Consortium for Advanced Research on Transport of Hydrocarbon in the Environment (CARTHE All Hands Meeting).

--- *Oral presentation*: “3D instability in an isolated geophysical vortex”.

* 02/2013, Chapel Hill, NC, USA. Dynamical Systems Theory and Lagrangian Data Assimilation in 3D+1 Geophysical Fluid Dynamics (Ocean 3D+1).

--- *Oral presentation*: “Chaotic advection a periodically-perturbed, three-dimensional rotating cylinder”.

* 06/2012, Miami, FL, USA. Lagrangian Analysis and Prediction of Coastal and Ocean Dynamics (LAPCOD-V).

**Teaching and Relevant Experiences**

* 08/2011 – 05/2016    Research Assistant at University of Miami
* 10/2015 – 11/2015 Teaching Assistant for “Geophysical Fluid Dynamics”
* 09/2015 Visiting Scholar for “Fluid Dynamics on Sustainability and the

Environment” at École Polytechnique, France

* 09/2014 Field operation in coastal ocean of southeast Florida
* 07/2014     Field operation in coastal ocean of southeast Florida
* 08/2013 – 12/2013    Teaching Assistant for “Computer Models of Fluid Dynamics”
* 01/2013 – 05/2013    Teaching Assistant for “Introduction to Physical Oceanography”

**Computer Skills**

Fortran; MATLAB; VisIt; Linux/Unix; etc.

**Awards and Honors**

* 2009 – 2010 Honorary Title of Outstanding Student at Ocean University of China
* 2009 – 2010 Excellent Students Scholarship at Ocean University of China
* 2008 – 2010 Excellent Academy Scholarship at Ocean University of China
* 2008 First Prize of National Undergraduate Ocean Knowledge Contest,

China

* 2009 Second Prize of National Undergraduate Mathematics Contest,

Shandong, China

**Society Services**

* 10/2015 Volunteer for “National Gandhi Day of Service”
* 03/2015 Volunteer for UM/RSMAS Auction Activity
* 04/2014 Volunteer for “Baynanza Beach (Miami) Cleanup and Exotic

Plant Removal”

* 09/2013 – 05/2014 Member of UM/RSMAS MPO Student Seminar Committee
* 01/2013 – 03/2016 Member of UM/RSMAS Garden Club

**Professional Affiliations**

American Geophysical Union