**Peng Wang, Ph.D.**

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**Address:** Dept. of Ocean Sciences, RSMAS, University of Miami, Miami, FL 33149, USA

**Education**

* Ph.D. in Meteorology and Physical Oceanography 2016

University of Miami, Miami, Florida, USA

* B.S. in Ocean Sciences 2011

Ocean University of China, Qingdao, Shandong, China

**Careers**

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

**Professional Experiences**

* Research Assistant in Physical Oceanography at UM/RSMAS 2011 - 2016
* Teaching Assistant for undergrad course of *Introduction to Physical Oceanography* 2013
* Teaching Assistant for grad course of *Computer Models of Fluid Dynamics* 2013
* Teaching Assistant for grad course of *Geophysical Fluid Dynamics* 2014 - 2016
* Drifter deployments for measuring surface circulation in Florida Biscayne Bay 2016
* Hydrological data collection in coastal ocean of South Florida 2014
* Near real-time forecaster for drifter deployments in Gulf of Naples, Italy 2012
* Visiting student at École Polytechnique Université Paris-Saclay, France 2015

**Professional Skills**

Fortran; MATLAB; Linux/Unix; Nek5000; VisIt; ParaView; Visual Basic; Excel; R; HTML; GitHub

**Awards and Honors**

* Scholarship for Doctoral Student at University of Miami, USA 2011 - 2016
* Honor of Outstanding Student at Ocean University of China 2009 - 2010
* Fellowship for Excellent Student at Ocean University of China 2009 - 2010
* Fellowship of Excellent Academy at Ocean University of China 2008 - 2010
* First Prize of Marine Knowledges Contest for National Undergraduate, China 2008
* Second Prize of Mathematics Contest for National Undergraduate, Shandong, China 2009

**Social Services**

* Volunteer for US National Gandhi Day of Service 2015
* Volunteer for UM/RSMAS Fundraising Auction 2015
* Volunteer for Miami Baynanza Beach Cleanup and Exotic Plant Removal 2014
* Co-founder of UM/RSMAS Garden Club 2013
* Committee member of UM/RSMAS MPO Graduate Student Seminar 2013 - 2014

**Professional Affiliations**

American Geophysical Union

**Publications**

*Submitted Manuscripts:*

* **Wang, P.**, Özgökmen, T. M., 2017. Langmuir circulation with explicit surface waves from moving-mesh modelling. *Geophysical Research Letters*.
* Zhai, L., Wang, X., **Wang, P.**, Zhang, B., Miralles-Wilhelm, F., Sternberg, L., 2017. Vegetation and discharge gate location affect evaporation in a tropical wetland as indicated by isotopic enrichment of reservoir water. *Journal of Hydrology*.

*Peer-reviewed Journals:*

* **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**

* 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