# Peng Wang, Ph.D.

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### **Education**

• Ph.D. in Meteorology and Physical Oceanography
University of Miami, Miami, USA

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

#### Careers

• Postdoctoral Research Associate, University of Miami, USA 2016 – Current

### **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.
- 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**

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

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*Oral presentation*: "Simulating Langmuir circulations without phase averaging surface gravity waves".

 AmeriMech Symposium on Fluid Transport and Nonlinear Dynamics. May 2016, Woods Hole, MA, USA.

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Poster presentation: "Spiral inertial waves emitted from geophysical vortices".

• Ocean Sciences Meeting (AGU). Feb. 2016, New Orleans, LA, USA.

Poster presentation: "Spiral inertial waves emitted from geophysical vortices".

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

Oral presentation: "Spiral inertial waves emitted from geophysical vortices".

• American Geophysical Union Fall Meeting (AGU Fall Meeting). Dec. 2014, San Francisco, CA, USA.

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*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 (Ocean 3D+1). Nov. 2014, Miami, FL, USA.

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Oral presentation: "The material transport and wave radiation in a 3D ocean eddy".

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

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Oral presentation: "3D instability in an isolated geophysical vortex".

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

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

• Lagrangian Analysis and Prediction of Coastal and Ocean Dynamics (LAPCOD-V). Jun. 2012, Miami, FL, USA.

## **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; VisIt; ParaView; Nek5000; HTML; Linux/Unix; etc.

## **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 Ren	noval	Apr. 2014
•	Member of UM/RSMAS MPO Student Seminar Committee	Sep. 20	13 - May  2014
•	Member of UM/RSMAS Garden Club	Jan. 20	13 – Mar. 2016