Peng Wang, Ph.D.

Email: wangpeng@miami.edu

Phone: (786) 266-3320

Website: https://wangpengphd.github.io

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

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

- Nov. 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".
- May 2016, Woods Hole, MA, USA. AmeriMech Symposium on Fluid Transport and Nonlinear Dynamics.
 - --- Poster presentation: "Spiral inertial waves emitted from geophysical vortices".
- Feb. 2016, New Orleans, LA, USA. Ocean Sciences Meeting (AGU).
 Poster presentation: "Spiral inertial waves emitted from geophysical vortices".
- Sep. 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".
- Dec. 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".
- Nov. 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".
- Apr. 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".
- Feb. 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".
- Jun. 2012, Miami, FL, USA. Lagrangian Analysis and Prediction of Coastal and Ocean Dynamics (LAPCOD-V).

Professional Experiences

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

Professional Skills

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

Professional Affiliations

American Geophysical Union

Awards and Honors

- Outstanding Student at Ocean University of China
 Excellent Students Scholarship at Ocean University of China
 Excellent Academy Scholarship at Ocean University of China
 First Prize of National Undergraduate Ocean Knowledge Contest, China
 2009 2010
 2008 2010
 2008 2010
- Second Prize of National Undergraduate Mathematics Contest, Shandong, China2009

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. 2013	– May 2014
•	Member of UM/RSMAS Garden Club	Jan. 2013 -	– Mar. 2016