

# 王 鹏

气象与物理海洋学博士

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单位 : 美国加州大学洛杉矶分校, 大气与海洋科学系

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## 学习经历

- 2016. 美国迈阿密大学 气象与物理海洋学博士
- 2011. 中国海洋大学 海洋科学学士

## 工作经历

- 2017 至今. 美国加州大学洛杉矶分校博士后  
(导师 James C. McWilliams 院士)
- 2016 – 2017. 美国迈阿密大学博士后  
(导师 Tamay M. Özgökmen 教授)

## 研究方向

- 波流相互作用、朗缪尔环流
- 中尺度与亚中尺度海洋涡旋
- 波浪破碎带与陆架海环流

## 专业相关经历

- 2014 – 2016. 研究生课程助教 --- 地球流体力学
- 2013. 研究生课程助教 --- 计算流体力学
- 2013. 本科生课程助教 --- 物理海洋学导论
- 2016. 参与美国佛罗里达州比斯坎湾环流观测
- 2014. 参与美国佛罗里达州近海水文数据采集
- 2012. 参与意大利那不勒斯湾环流预报

## 计算机技能

Fortran; MATLAB; Linux/Unix; Nek5000; ROMS; VisIt; GOTM; etc.

## 获得奖项

- 2011 – 2016. 美国迈阿密大学博士生全额奖学金
- 2009 – 2010. 中国海洋大学优秀学生
- 2008 – 2010. 中国海洋大学人才基地奖学金
- 2008. 首届全国大学生海洋知识竞赛国家一等奖
- 2009. 全国大学生数学竞赛山东省二等奖

## 学术评审服务

- 美国自然科学基金审稿人
- Geophysical Research Letters 期刊审稿人
- Journal of Ocean University of China 期刊审稿人

## 专业相关会员

美国地球物理协会会员  
中美海洋与大气协会会员

## 文章著作

### 期刊文章：

- **Wang, P.**, McWilliams, J. C., Uchiyama, Y., and Chekroun, M.. Effects of Wave Streaming and Wave Variations on Nearshore Wave-driven Circulation. *Journal of Physical Oceanography*, under review Dec. 2019.
- Li, Q., et al. 2019. Comparing Ocean Surface Boundary Vertical Mixing Schemes Including Langmuir Turbulence. *Journal of Advances in Modeling Earth Systems*, DOI: <https://doi.org/10.1029/2019MS001810>.

- Brett, G., Pratt, L., Rypina, I., and **Wang, P.**, 2019. Competition between chaotic advection and diffusion: stirring and mixing in a 3D eddy model. *Nonlinear Process in Geophysics*, DOI: <https://doi.org/10.5194/npg-2018-54>.
- Zhai, L., Wang, X., **Wang, P.**, Zhang, B., Miralles-Wilhelm, F., Sternberg, L., 2019. Vegetation and location of water inflow affect evaporation in a subtropical wetland as indicated by the deuterium excess method. *Ecohydrology*, DOI: <https://doi.org/10.1002/eco.2082>
- **Wang, P.**, Özgökmen, T. M., 2018. Langmuir circulation with explicit surface waves from moving-mesh modelling. *Geophysical Research Letters*, DOI: <https://doi.org/10.1002/2017GL076009>.
- **Wang, P.**, Özgökmen, T. M., Haza, A. C., 2016. Material dispersion by oceanic internal waves. *Environmental Fluid Mechanics*, DOI: [10.1007/s10652-016-9491-y](https://doi.org/10.1007/s10652-016-9491-y).
- **Wang, P.**, Özgökmen, T. M., 2016. Spiral inertial waves radiated from geophysical vortices. *Ocean Modelling*, DOI: <https://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: <https://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: <https://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: <https://doi.org/10.1017/jfm.2013.583>.

## 会议文章：

- 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*.

## 博士专题论文：

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

## 学术会议

- California GFD meeting at California Institute of Technology  
--- Pasadena, California, USA; September 2019  
*Oral Presentation:* “Effects of wave streaming and wave variations on nearshore wave-driven circulation”
- 受邀访问中国科学院海洋研究所  
--- Qingdao, Shandong, China; January 2019  
*Invited talk:* “Wave-current interaction with application to Langmuir circulation”
- The Fourth Xiamen Symposium on Marine Environmental Sciences (XMAS-IV)  
--- Xiamen, Fujian, China; January 2019  
*Oral Presentation:* “Wave-current interaction with application to Langmuir circulation”
- 受邀访问南京信息工程大学  
--- Nanjing, Jiangsu, China; January 2019  
*Invited talk:* “Wave-current interaction with application to Langmuir circulation”
- 受邀访问中国海洋大学  
--- Qingdao, Shandong, China; December 2018  
*Invited talk:* “Wave-current interaction with application to Langmuir circulation”
- Planetary Boundary Layers in Atmospheres, Oceans, and Ice on Earth and Moons  
--- KITP, Santa Barbara, CA, USA; April – May 2018
- 中山大学海洋科学优秀青年国际论坛  
--- Zhuhai, China; December 2017  
*Oral presentation:* “Material transport inside Langmuir circulation and an unstable eddy”
- 华东师范大学海外优秀青年论坛  
--- 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