# Curriculum vitae

## Personal information


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| Name: | Yao Fu |
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## Education

Ph.D. 2013.10 - 2018.01, **Physical Oceanography**
GEOMAR Helmholtz Centre for Ocean Research Kiel and
University of Kiel, Germany
Supervisor: Prof. Dr. Peter Brandt and Dr. Johannes Karstensen
Funding: DFG FOR1740 Atlantic Freshwater Cycle
Dissertation: Meridional Overturning Circulation in the Tropical Atlantic
Final grade: 1.0 (Excellent in German university grade system)

M.S. 2010.10 - 2013.08, **Climate Physics**
University of Kiel, Germany
Supervisor: Prof. Dr. Richard Greatbatch and Prof. Dr. Peter Brandt
Dissertation: Equatorial Deep Jets: Observation and Modeling
Final grade: 1.7 (good in German university grade system)

B.S. 2006.09 - 2010.07, **Ocean Technology**
Dalian Ocean University, Dalian, China

## Professional and Research Experience

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| 2021.05 - present | Research Scientist II<br>Georgia Institute of Technology, Atlanta, USA |
| 2018.02 - 2021.04 | Junior research scientist<br>South China Sea Institute of Oceanology, Chinese academy of Sciences, Guangzhou, China |
| 2013.10 - 2018.01 | Scientific employee<br>GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany |
| 2011.01 - 2013.06 | Student Assistant<br>GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany |

## Teaching Experience

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| Co-Instructor | 2013-2018 | Advanced Climate Seminar and Physical Oceanography Seminar<br>University of Kiel<br>co-supervised graduate and undergraduate students |
| Co-Instructor | 2018-2021 | Supervised graduate students to conduct research on Atlantic ocean circulation at the South China Sea Institute of Oceanology, Chinese academy of Sciences |

**Scientific Cruises**

2016.02.29 - 2016.03.16, Cruise M124 onboard R/V Meteor, from Cape Town, South Africa to Rio de Janeiro, Brazil. In charge of the underway-CTD and CTD operation and data processing. Chief scientist: Dr. Johannes Karstensen.

2014.11.02 - 2014.11.29, Cruise PS88 onboard R/V Polarstern, from Las Palmas to Cape Town, South Africa. In charge of the lowered ADCP operation and data processing. Chief scientist: Dr. Frank Niessen.

2012.10.24 - 2012.11.23, Cruise MSM22 onboard R/V Maria S. Merian, from Mindelo, Cape Verde to Mindelo, Cape Verde. In the CTD watch, and responsible for the moored ADCP data processing. Chief scientist: Prof. Dr. Peter Brandt.

**Peer Reviewed Publications**

**Fu, Y.**, Li, F., Karstensen, J., Wang, C. (2020), A stable Atlantic Meridional Overturning Circulation in a changing North Atlantic since the 1990s, *Science Advances*, 6, eabc7836.

Feng, E., Sawall, Y., Wall, M., Lebrato, M., **Fu, Y.** (2020), Mitigating coral bleaching with artificial upwelling: a modeling investigation, *Frontiers in Marine Science*, 7:556192.

Tuchen, F. P., Lübbecke, J. F., Brandt, P., **Fu, Y.** (2020), Observed transport variability of the Atlantic Subtropical Cells and their connection to tropical sea surface temperature variability, *Journal of Geophysical Research: Oceans*, 125, 1-20.

**Fu, Y.**, Wang, C., Brandt, P., Greatbatch, R. J. (2019). Interannual Variability of Antarctic Intermediate Water in the Tropical North Atlantic. *Journal of Geophysical Research: Oceans*, 124, 4044-4057.

**Fu, Y.**, Karstensen, J., Brandt, P. (2018), Atlantic meridional overturning circulation at 14.5°N in 1989 and 2013 and 24.5°N in 1992 and 2015: volume, heat, and freshwater transports, *Ocean Science*, 14(4), 589-616.

**Fu, Y.**, Karstensen, J., Brandt, P. (2017), On the meridional ageostrophic transport in the tropical Atlantic, *Ocean Science*, 13(4), 531-549, doi:10.5194/os-13-531-2017.

Greatbatch, R. J., Brandt, P., Claus, M., Didwischus, S. H. and **Fu, Y.** (2012), On the width of the equatorial deep jets, *Journal of Physical Oceanography*, 42. pp. 1729-1740.

**Work in Progress**

**Fu, Y.**, Brandt, P., Tuchen, F. P., Lübbecke, J. F., Wang, C. (2021), Representation of the mean Atlantic Subtropical Cells in CMIP6 models (Submitted to JGR Oceans)

**Fu, Y.**, Lozier, S. M., coauthors (2022), Seasonalilty of the overturning circulation in the subpolar North Atlantic (in prep)

**Conference/Meeting**

**Fu, Y.**, Brandt, P., Tuchen, F. P., Lübbecke, J. F., Wang, C. (2021), Representation of the mean Atlantic Subtropical Cells in CMIP6 models [Talk] in European Geoscience Union General Assembly 2021 (virtual online meeting).

**Fu, Y.**, Li, F., Karstensen, J., Wang, C. (2020), A stable Atlantic Meridional Overturning Circulation in a changing North Atlantic Ocean [Talk] in European Geoscience Union General Assembly 2020 (virtual online meeting).

**Fu, Y.**, Wang, C., Brandt, P., Greatbatch, R. (2019), Interannual variability of Antarctic intermediate Water in the Tropical North Atlantic [Talk] in European Geoscience Union General Assembly 2019, Vienna, Austria.

**Fu, Y.**, Karstensen, J., Brandt, P., (2017), Atlantic Meridional Overturning Circulation at 14.5°N and 24.5°N [Poster] in: European Geoscience Union General Assembly 2017, Vienna, Austria.

**Fu, Y.**, Karstensen, J., Brandt, P., (2017), Atlantic Meridional Overturning Circulation at 14.5° N and 24.5°N [Invited talk] in: LTO Seminar, South China Sea Institute of Oceanology, Guangzhou, China.

**Fu, Y.**, Karstensen, J., Brandt, P., (2015), On the meridional Ekman transport in the tropical Atlantic [Poster] in: Open Science Conference on “Salinity and Freshwater Changes in the Ocean”, Hamburg, Germany.

**Fu, Y.**, Karstensen, J., Brandt, P., (2015), Estimation of the Meridional Ekman transport at 14.5° N in the Atlantic [Poster] in: European Geoscience Union General Assembly 2015, Vienna, Austria. This poster won the **Outstanding Student Poster Award**. http://www.egu.eu/awards-medals/ospp-award/2015/

**Fu, Y.**, Karstensen, J., Brandt, P., (2014), Estimation of the Ekman transport at 14.5° N in the Atlantic [Talk] in: FOR1740 annual meeting, Kiel, Germany.

**Fu, Y.**, Greatbatch, R., Brandt, P. (2014), Equatorial Deep Jets in a Shallow Water Model [Poster] in: Atmosphere and Ocean dynamics: A scientific workshop to celebrate Prof. Dr. Richard Greatbatch’s 60th birthday, Liverpool, UK.