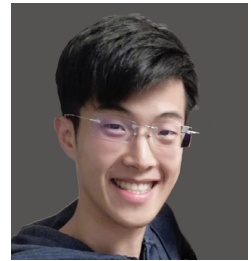


Dr. Jen-Ping Peng Oceans Graduate School Postal address: The University of Western Australia, 35 Stirling Highway, 6009, Perth, WA, Australia Email: jen-ping.peng@uwa.edu.au



Biography

Dr. Jen-Ping Peng, a physical oceanographer, is currently working in the research group of Prof. Nicole Jones at the Ocean Graduate School at the University of Western Australia, under the Australian Research Council Discovery Project: Quantifying vertical and lateral ocean transport due to front and eddies (<https://www.swot-adac.org/campaigns/north-west-shelf/>). His main works include i) the quantification of the intensity and location of ocean currents at unprecedented fine spatial scales by using data from a new generation of high-resolution satellites, ii) the preparation for a large field campaign in the entire Indian Ocean Basin to evaluate and exploit the satellite data, and iii) the investigation of submesoscale dynamics and turbulent mixing that have important consequences for the global energy cycle. Previously, he was part of the DFG funded large-scale multi-disciplinary TRR181 project as a PhD student and PostDoc in Germany (<https://www.trr-energytransfers.de/>), working on a subproject: Energy budget of the ocean surface mixed layer. His general research interests include:

Upper Ocean dynamics and mixing

Submesoscale fronts, filaments, and eddies

Small-scale turbulence mixing and energy dissipation

Diurnal effects on the upper oceans

Air-sea interactions

Oceanic/coastal freak waves

He performs his research using a variety of methods, including field measurements, satellite images, theoretical modeling, and machine learning modeling. To date, he has published 4 articles in peer-reviewed international journals and contributed 4 review works (incl. *GRL*, *JGR*, and *Frontiers in Marine Science*) and 1 editorial work for *Remote Sensing*. Beyond the research, he has participated in several research cruises in the open oceans, semi-closed seas, and fjords (over 56 days on the sea), and been a teaching assistant for the lecture on Hydrodynamics and Marine turbulence.

Employment

Research Associate

Oceans Graduate School

10 Jan 2022 → present