

KAYLIE COHANIM

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📞 +1-818-282-2346

📍 Los Angeles, CA, USA



EDUCATION

University of California, Los Angeles

B.S. Mathematics \ Atmospheric & Oceanic Sciences

📅 Sept 2017 – Dec 2019

📍 Los Angeles, USA

Princeton University

M.S. Atmospheric & Oceanic Sciences

📅 Sept 2020 – Jan 2023

📍 Los Angeles, USA

University of California, Los Angeles

PhD Atmospheric & Oceanic Sciences

📅 Jan 2023 – currently

📍 Los Angeles, USA

RESEARCH EXPERIENCE

UCLA Ocean Dynamics Research Group

NSF-GRFP Fellow

📅 Jan 2023 – present

📍 UCLA

My research uses high-resolution and Large Eddy Simulations to examine novel submesoscale dynamics beneath ice-shelf cavities and its influence on heat transport and melt rates in Antarctica.

Climate Change: From Puzzles to Policies

Teaching Assistant

📅 Winter

📍 UCLA

Submesoscales Under Near-Resonant Inertial Shear Experiment (SUNRISE) Field Campaign

Graduate Student

📅 Jun 2022

📍 Gulf of Mexico

Observational experience collecting data from the Gulf of Mexico. Observational data collected serves to support research exploring the interaction between wind-driven near-inertial oscillations and internal waves with submesoscale fronts, eddies and instabilities.

UCLA Ocean Dynamics Research Group

Research Assistant I

📅 Apr 2018 – Aug 2020

📍 Los Angeles, USA

This research explores oceanic mixed-layer convection and the genesis of eddies beneath cracks in sea-ice, in an attempt to better understand and parameterize the eddy fields in polar regions. Published.

UCLA Earth, Wind and Particle Research Group

Student Researcher, UCLA CARE SEM Fellow

📅 Apr 2018 – Feb 2019

📍 Los Angeles, USA

Determining the effects of interparticle forces on the properties of wind-blown sand on Titan, Saturn's moon. Published.

RESEARCH INTERESTS

Submesoscale processes, ice-ocean interactions, eddy mechanics and tracer transport, mixing and convection, modeling and theory, ice shelf cavity circulation, ice melt rate, sea-level rise.

PRESENTATIONS & TALKS

- Atmospheric and Oceanic Fluid Dynamics Conference 2024 (talk)
- Hebrew University invited seminar speaker 2024
- Ocean Science Meeting 2024 (talk)
- West Antarctic Ice Sheet Workshop 2024 (poster)
- California Geophysical Fluid Dynamics Conference 2023 (talk)
- Gordon Research Conference - Ocean Mixing 2022 (attended)
- California Geophysical Fluid Dynamics Conference 2020 (talk)
- American Geophysical Union (AGU) - Ocean Sciences Meeting 2020 (presentation)
- California Geophysical Fluid Dynamics Conference 2019 (attended)
- AGU Meeting 2018 (presentation)
- UCLA Center for Academic Research & Excellence in Science, Engineering & Mathematics (CARE SEM) Poster Presentation 2018 (presentation)

AWARDS, HONORS & FELLOWSHIPS

- NSF Graduate Research Fellowships Program (2022)
- AGU Meeting 2018 Travel Grant
- UCLA CARE SEM 2018 Summer Fellowship
- Phi Theta Kappa Honors Society (2016–present)
- Exemplary Service Award for Outstanding Performance, Israeli Intelligence Force (2014)

MENTORING

- Research mentor to undergraduates in UCLA Ocean Dynamics Research Group
- UCLA XEP Undergraduate-graduate mentoring program

PUBLICATIONS

[1] Cohanim, Kaylie, and Andrew L. Stewart. "Symmetric Instability in the Sub-Ice Shelf Pycnocline." *Journal of Physical Oceanography*. Submitted.

[2] James Hilditch, Kerstin Bergentz, Devon Northcott, Caique Dias Luko, Kaylie Cohanim, Dylan Schitling, Alejandra Sanchez-Rios, Kaelen Weiss, Robert Hetland, Jennifer MacKinnon, Jonathan Nash, R. Kipp Shearman, and Lief Thomas. "Observations of subduction, downward heat flux and dense filament collapse in the northern Gulf of Mexico." *Journal of Geophysical Research: Oceans*. Submitted.

[3] Cohanim, Kaylie, Ken X. Zhao, and Andrew L. Stewart. "Dynamics of Eddies Generated by Sea Ice Leads." *Journal of Physical Oceanography* 51.10 (2021): 3071-3092.

[4] Comola, Francesco, Jasper F. Kok, Juan M. Lora, **Kaylie Cohanim**, Xinting Yu, Chao He, Patricia McGuigan, Sarah M. Hörst, and Francis Turney. "Titan's Prevailing Circulation Might Drive Highly Intermittent, Yet Significant Sediment Transport." *Geophysical Research Letters* 49.7 (2022): e2022GL097913.

VOLUNTEERING

- Member of the Initiative to Combat Antisemitism Action Group
- Israeli American Council S.H.I.E.L.D fellow (2024 - present)
- Israeli American Council Ambassador Fellow (2024 - present)
- Earth Educators' Rendezvous Workshop (2022) - experience with building rotating tanks
- Boys and Girls STEM club presenter with rotating tanks (2022)
- Princeton Plasma Physics Laboratory young Women's Conference - crafted videos and led Q & A session on GFD experiments in tanks
- Research-Mentoring Program (ReMatch) Fellow
- UCLA's Exploring Your Universe rotating tank booth
- Volunteered in Vietnam with children and veterans directly affected by Agent Orange (2015)