

# Brett McKim

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📄 [mckimb.github.io](https://mckimb.github.io)

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## Education

- 2019–Now **PhD, Climate Physics**, *University of Exeter*, United Kingdom.  
Advisor: Geoff Vallis
- 2015–2019 **Bachelor of Science, Physics**, *University of California, Santa Barbara*, United States.

## Research Interests

**Geophysical Fluid Dynamics:** Moist Convection and Entrainment  
**Climate:** Runaway Greenhouse Regimes, Hydrological Cycle, Simple Spectral Models

## Experience

- 2018–2019 **Ernest F. Hollings Scholar**, *NOAA Geophysical Fluid Dynamics Laboratory*.  
Advisors: Leo Donner & Nadir Jeevanjee
- 2018 **International Exchange**, *University of Edinburgh*.  
Advisor: Alexander Morozov
- 2017 **NSF Research Experience for Undergraduates**, *Naval Postgraduate School*.  
Advisors: Jeff Paduan & Mike Cook
- 2016 **EUREKA Scholar**, *University of California, Santa Barbara*.  
Advisor: Libe Washburn

## Skills

Numerics Python, MATLAB, *Mathematica*, Dedalus (Pseudospectral PDE Solver)  
Graphics Adobe Lightroom & Photoshop

## Awards and Honors

- 2018–2019 NOAA Ernest F. Hollings Scholar  
2017–2018 UC Santa Barbara Alumni Scholarship  
2017 Philip and Aida Siff Scholarship  
2016 UC Santa Barbara EUREKA Scholar

## Publications

1. B. McKim, N. Jeevanjee, D. Lecoanet, "Buoyancy-Driven Entrainment in Dry Thermals." *QJRM*, 2019.

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## Presentations

5. Poster: Atmospheric and Oceanic Fluids Conference. "Buoyancy-Driven Entrainment in Dry Thermals," Jun. 28, 2019.
4. Poster: University of Edinburgh, Department of Physics. "Simulating Microtubule Mixtures On a Sphere," Dec. 2018.
3. Talk: NOAA GFDL. "Clouds: Do they Feel Drag?" Aug. 2018.
2. Talk: Eastern Pacific Ocean Conference, South Lake Tahoe, CA 09/2017. "Water Trajectory Patterns in Monterey Bay," Sep. 2017.
1. Talk: UCSB, Kavli Institute for Theoretical Physics. "How Winds and Sea Level Differences Control Coastal Ocean Currents," Sep. 16, 2016. <http://online.kitp.ucsb.edu/online/undergrad16/mckim/>

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## Media

3. *How the Ocean is Just Like Your Cup of Coffee* by Brett McKim. <https://medium.com/for-the-curious/coffee-and-oceans-519121b61128>
2. *Understanding the Sea: UCSB Undergraduate Dives into Tidal Movement* by Soobin Lee. <https://thebottomline.as.ucsb.edu/2017/01/understanding-the-sea-ucsb-undergraduate-dives-into-tidal-movement-research>
1. *An Introduction to Tidal Harmonic Analysis* by Brett McKim. <https://undergrad.research.ucsb.edu/author/brettmckim/>