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Aidan Blaser

Research Interests

Surface Gravity Waves, Fluid Mechanics, Air-Sea Interactions

Education

2021-PRESENT | **Ph.D. in physical oceanography**, Scripps Institution of Oceanography. Current GPA (4.0/4.0)

2017-2021 B.A. in physics (concentration in earth sciences), Cornell University

Honors: magna cum laude (4.04/4.3) Phi Beta Kappa Honors Society

Research Experience

2021-PRESENT | Graduate Student Researcher - Scripps Institution of Oceanography

Currently working alongside Luc Lenain and Nick Pizzo (SIO) to investigate mass transport of steep surface gravity waves, as well as wave-wave interactions and directional effects.

2020-2021 Undergraduate Student Researcher - Cornell University

Worked with Peter Diamessis on turbulent wakes produced by a moving object in a stratified flow as well as mixing caused by breaking internal solitary waves.

2019 MPL Intern - Scripps Institution of Oceanography

For the summer of 2019, I worked alongside Luc Lenain in the Air-Sea lab to understand the statistics of whitecap wave breaking events in the open ocean in order to better understand surface mixing.

2018 | Research Assistant - Princeton University

Archived and digitized the notes of the late Tony Dahlen, Professor of Geophysics at Princeton. The culmination of this work was featured in an article in the Smilodon, Princeton's geosciences newsletter.

Teaching Experience and Involvement

$2022 \mid$ **COAP Tutor** - SIO

COAP Department Tutor for MS 1st-year students at Scripps. Assists with classes ranging from fluid mechanics, physical oceanography, and math.

2022-2023 | CASPO Seminar Committee Member- SIO

Member of a graduate student committee who chooses weekly speakers from SIO and beyond. In addition to seminars, weekly lunches and gatherings are organized for speakers and students alike.

2018-2019 | Physics Undergraduate Teaching Assistant - Cornell University

Assisted in laboratory demonstrations and instruction for introductory level physics courses at Cornell. Participated in lab planning meetings to improve physics education research.

Presentations

Aidan Blaser, Luc Lenain, and Nick Pizzo. The Lagrangian mean flow of broadband wave fields. APS DFD Meeting, Washington DC, 2023.

Aidan Blaser, Luc Lenain, and Nick Pizzo. The Lagrangian mean flow of broadband wave fields. Pre-APS DFD Biological and Environmental Fluid Dynamics Meeting, University of Pennsylvania, PA, 2023. **Recipient of Best Speaker Award**.

Aidan Blaser, Raphael Benamran, A. Bia Villas-Bôas, Luc Lenain, and Nick Pizzo. Why water waves cause drift. Scripps Student Symposium (S^3) , San Diego, CA, 2023. **Recipient of Best Speaker Award**.

Aidan Blaser, Nick Pizzo, and Luc Lenain. The Lagrangian mean flow of monochromatic and broadband wave fields. Waves in Sea Environment (WISE) meeting, Princeton, NJ, 2023.

Aidan Blaser. Deep Water Breaking Wave Statistics. Marine Physical Laboratory Internship, San Diego, 2019.