

KAUSHAL GIANCHANDANI

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RESEARCH INTEREST

(Physical & Paleo-) Oceanography, Climate (Dynamics & Data Analysis), Nonlinear dynamics

EDUCATION

Hebrew University of Jerusalem, Israel (HUJI) Oct 2017 - present
Ph.D. in Oceanography
Thesis: The physical-biogeochemical dynamics of snowball Earth conditions: hard vs soft snowball states
Advisors: Prof. Hezi Gildor, Prof. Yosef Ashkenazy and Prof. Eli Tziperman

National Institute of Science Education and Research (NISER), India Aug 2012 - May 2017
Integrated B.Sc. - M.Sc. in Physics
Thesis: Transition to turbulence in subcritical baroclinic flows
Advisor: Dr. Antoine Venaille

SCHOOLS

International Spring School: Hydrothermal Vents May 2021
European Astrobiology Network Association (EANA), Online

Summer School on Fluid Dynamics of Sustainability & the Environment (FDSE) Sep 2018
University of Cambridge, Cambridge, UK

10th Winter School on Astroparticle Physics (WAPP) Dec 2015
Bose Institute, Darjeeling, India

WORK EXPERIENCE

Institute of Earth Sciences, HUJI Oct 2017 - present
Graduate Research Assistant
Jerusalem, Israel

Institute of Earth Sciences, HUJI Oct 2020 - Jan 2021
Teaching Assistant
Jerusalem, Israel
Course: Mathematical methods in scientific models
Instructor: Prof. Nathan Paldor

École Normale Supérieure de Lyon (ENS de Lyon) May - Jul 2016
Summer Intern
Lyon, France
Project Title: Transition to turbulence in subcritical baroclinic flows (continued as master's thesis)
Advisor: Dr. Antoine Venaille

Institute of Mathematical Sciences (IMSc) Jun - Jul 2015
Summer Research Fellow
Chennai, India
Project Title: Binary logic using spatially patterned deaths in chemical oscillators
Advisor: Prof. Sitabhra Sinha

Indian Institute of Science Education and Research (IISER) - Kolkata May - Jul 2014
Summer Intern
Kolkata, India
Project Title: Time series analysis of the bouncing ball experiment
Advisors: Prof. Prasanta K. Panigrahi and Prof. A.N. Sekar Iyengar

NISER May - Jun 2013
Summer Intern
Bhubaneswar, India
Project Title: Motion of the Foucault pendulum
Advisors: Dr. Joydeep Bhattacharjee

PUBLICATIONS

2. **Gianchandani, Kaushal**, Hezi Gildor, and Nathan Paldor. “On the role of domain aspect ratio in the westward intensification of wind-driven surface ocean circulation.” *Ocean Science* 17, no. 1 (2021): 351-363.
1. Campisi-Pinto, Salvatore, **Kaushal Gianchandani**, and Yosef Ashkenazy. “Statistical tests for the distribution of surface wind and current speeds across the globe.” *Renewable Energy* 149 (2020): 861-876.

INVITED TALKS

Atmospheres and Oceans Seminar Johns Hopkins University, Baltimore, MD, USA	Jan 2021
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CONFERENCES AND WORKSHOPS

Ocean Sciences Meeting (OSM) 2022 Session: AI05 Role of ocean-atmosphere dynamics in global climate, Online	Talk	Feb - Mar 2022
Next Generation Challenges in Energy-Climate Modeling Workshop University of Reading, Reading, UK, Online	Poster	Sep 2021
NASA PACE Applications Workshop National Aeronautics and Space Administration, Online		Sep 2021
Wave Dynamics and Climate Workshop Inter-University Institute for Marine Sciences, Eilat, Israel	Talk	Sep 2019
Israeli Association for Aquatic Sciences 15th Annual Meeting Haifa, Israel	Talk	Mar 2019
EPScon 2019 Weizmann Institute of Science, Rehovot, Israel	Poster	Mar 2019
GFD Days 2019 Ben-Gurion University of the Negev, Sede Boqer, Israel	Poster	Jan 2019
Ice, Oceans and Atmospheres on Earth and Elsewhere CNR Headquarters, Rome, Italy		May 2018
10th Conference on Nonlinear Systems and Dynamics Indian Institute of Science Education and Research - Kolkata, Kolkata, India	Poster	Dec 2016
Statphys26 Lyon, France		Jul 2016

SERVICES

Mentor , Young Data Scientists League (YDSL) Mentor to 15 high school students of Launch High School, Cedar City, UT, USA	Jan 2022 - present
Member , The Oceanography Society (TOS) Student Committee Served on the Coding Resources Subcommittee	Sep 2021 - present
Co-chair , Session AI05 in OSM 2022 Participant of the inaugural OSM Session Mentoring Program (OSMP)	Feb - Mar 2022

AWARDS

Registration Grant, OSM 2022 Sponsor: AGU, ASLO and TOS	Feb - Mar 2022
Innovation in Science Pursuit for Inspired Research (INSPIRE) Fellowship Sponsor: Department of Science & Technology (DST), Govt. of India <i>Awarded to the top 1% of students in India pursuing undergraduate degree in basic science</i>	2012 - 2017
Physics Summer Research Fellowship Sponsor: IMSc, Chennai <i>Awarded to 15 interns selected from applicants across India</i>	Jun - Jul 2015

MEMBERSHIPS

The Oceanography Society	Apr 2019 - present
Israeli Association for Aquatic Sciences	Mar 2019 - present
The New York Academy of Science	Oct 2020 - Octo 2021

TECHNICAL STRENGTHS

Computer Languages	: Python, Fortran, Bash, HTML
Packages	: MITgcm, (py)ferret, L ^A T _E X , gnuplot
Software	: MATLAB, Mathematica
Operating systems	: Ubuntu (other linux based OSs), macOS (unix), Microsoft Windows