

# KAUSHAL GIANCHANDANI

## Curriculum Vitae

Fredy and Nadine Hermann Institute of Earth Sciences  
Hebrew University of Jerusalem  
Edmond J Safra Campus  
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## EDUCATION

**Ph.D. in Oceanography** Oct 2017 – present

Hebrew University of Jerusalem, Israel (HUJI)

*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

**Integrated B.Sc. - M.Sc. in Physics** Aug 2012 – May 2017

National Institute of Science Education and Research (NISER), Bhubaneswar, India

*Thesis: Transition to turbulence in subcritical baroclinic flows*

Advisor: Dr. Antoine Venaille

## RESEARCH INTERESTS

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

## 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.

## HONORS AND AWARDS

**Innovation in Science Pursuit for Inspired Research (INSPIRE) Fellowship** Aug 2012 – May 2017

Sponsor: Department of Science & Technology (DST), Govt. of India

**Physics Summer Research Fellowship** Jun – Jul 2015

Sponsor: Institute of Mathematical Sciences (IMSc), Chennai

**Best Student award**, St. Gregorios Senior Secondary School, Udaipur 2012

## EMPLOYMENT HISTORY

**Graduate Research Assistant** Oct 2017 – present

Institute of Earth Sciences, Hebrew University of Jerusalem, Israel

**Teaching Assistant** Oct 2020 – Jan 2021

Institute of Earth Sciences, Hebrew University of Jerusalem, Israel

Course: [Mathematical Methods in Scientific Models](#)

Instructor: Prof. Nathan Paldor

**Summer Intern** May – Jul 2016

École Normale Supérieure de Lyon (ENS de Lyon)

*Project Title: Transition to turbulence in subcritical baroclinic flows* (cont. as master's thesis)

Advisor: Dr. Antoine Venaille

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

**Summer Intern** May – Jun 2014  
 Indian Institute of Science Education and Research – Kolkata  
*Project Title: Time series analysis of bouncing ball experiment using Wavelet Transformation and Empirical Mode Decomposition*  
 Advisor: Prof. Prasanta K. Panigrahi and Prof. A.N. Sekar Iyengar

## INVITED TALKS

**Atmospheres and Oceans seminar** Jan 2021  
 Johns Hopkins University, Baltimore, MD, USA.

## CONFERENCES, SCHOOLS and WORKSHOPS

Conferences and Workshops:

**Next Generation Challenges in Energy-Climate Modelling Workshop 2021** Poster Sep 2021  
 University of Reading, Reading, UK, Online

**NASA PACE Applications Workshop 2021** Sep 2021  
 National Aeronautics and Space Administration, Virtual event

**Wave Dynamics and Climate Workshop** Talk Sep 2019  
 Inter-University Institute for Marine Sciences, Eilat, IL

**The Israeli Association for Aquatic Sciences' 15th Annual Meeting** Talk Mar 2019  
 Haifa, IL

**EPScon 2019** Poster Mar 2019  
 Weizmann Institute of Science, Rehovot, IL

**GFD Days 2019** Poster Jan 2019  
 Ben-Gurion University of the Negev, Sede Boqer, IL

**Ice, Oceans and Atmospheres on Earth and Elsewhere** May 2018  
 CNR Headquarters, Rome, IT

**10th Conference on Nonlinear Systems and Dynamics** Poster Dec 2016  
 Indian Institute of Science Education and Research - Kolkata, Kolkata, IN

**Statphys26** Jul 2016  
 Lyon, FR

Schools:

**International Spring School: Hydrothermal Vents** May 2021  
 European Astrobiology Network Association, Online

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

**10th Winter School on Astroparticle Physics** Dec 2015  
 Bose Institute, Darjeeling, IN

## PROFESSIONAL SERVICES

<b>Co-chair</b> , Session AI05 at Ocean Science Meeting 2022 Participant of the inaugural OSM Session Mentoring Program (OSMP)	Feb – Mar 2022
<b>Member</b> , The Oceanography Society (TOS) Student Committee Served on the Coding Resources Subcommittee	Sep 2021 – present

## MEMBERSHIPS

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

## COMPUTER SKILLS

Languages:	Python, C++, HTML, Bash, Fortran
Packages:	MITgcm, (py)ferret, Latex, gnuplot
Software:	MATLAB, Mathematica
Operating systems:	Ubuntu (other linux based OSs), macOS (unix), Microsoft Windows.