# KAUSHAL GIANCHANDANI

# Curriculum Vitae

Fredy and Nadine Hermann Institute of Earth Sciences Hebrew University of Jerusalem Edmond J Safra Campus Givat Ram, Jerusalem, Israel - 9190401 kaushal.g@mail.huji.ac.il +972 (50) 471 4621

https://kaushalgianchandani.github.io/

#### **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:

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-Guiron University of the Negev, Sede Boqer, IL  Ice, Oceans and Atmospheres on Earth and Elsewhere		May 2018
CNR Headquaters, 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		75. 2010

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 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 MITgcm, (py)ferret, Latex, gnuplot Packages:

Software: MATLAB, Mathematica

Operating systems: Ubuntu (other linux based OSs), macOS (unix), Microsoft Windows.