## **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, Nonlinear dynamics, Statistical analysis

### **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* (2021): in press.

[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

Project title: The physical-biogeochemical dynamics of snowball Earth conditions

Advisors: Prof. Hezi Gildor, Prof. Yosef Ashkenazy and Prof. Eli Tziperman

Project title: Models of surface ocean circulation Advisors: Prof. Nahtan Paldor and Prof. Hezi Gildor

Project title: Statistical analysis of global distribution of surface winds and ocean currents

Advisor: Prof. Yosef Ashkenazy

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: Bouncing ball(s) experiment: Time series analysis using Wavelets and EMD

Advisor: Prof. Prasanta K. Panigrahi and Prof. A.N. Sekar Iyengar

### **INVITED TALKS**

### Atmospheres and Oceans seminar

Jan 2021, Baltimore, US

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 Boger, 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

### **Schools:**

### 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 The Oceanography Society Israeli Association for Aquatic Sciences Oct 2020 - Oct 2021 Apr 2019 - present Mar 2019 - present

## **COMPUTER SKILLS**

Languages: Python, C++, HTML, Bash, Fortran

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

Software: MATLAB, Mathematica

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