

# KAUSHAL GIANCHANDANI

## Curriculum Vitae

Fredy and Nadine Hermann Institute of Earth Sciences  
Hebrew University of Jerusalem  
Edmond J Safra Campus  
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<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*  
Advisor: Dr. Antoine Venaille

(cont. as master's thesis)

### **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-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 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, Latex, gnuplot  
Software: MATLAB, Mathematica  
Operating systems: Ubuntu (other linux based OSs), macOS (unix), Microsoft Windows.