Nili Harnik, Ph.D.

CURRICULUM VITAE

Date and place of birth: 1969, Jerusalem, Israel

Marital Status (No. of children): Married, two children

Home page: http://www.tau.ac.il/~harnik/

RESEARCH INTERESTS:

Large scale atmospheric dynamics and variability, climate dynamics, global circulation regimes, jet streams – eddies - Hadley cell interactions, extreme events, stratospheric dynamics and interaction with the troposphere, shear instability and wave dynamics, atmosphere-ocean interaction, tropical storms, convectively coupled waves and turbulence

EDUCATION

2000 MIT Atmospheric Sciences Ph.D. 1993 Tel Aviv University Geophysics & Atmos. Sci. B.Sc.

APPOINTMENTS

2014-present: Professor, Geophysics Department, Tel Aviv University, Israel

2016-2020 Head of Geophysics Department, Tel Aviv University, Israel

2016: 1 month visiting prof., Department of Earth Sciences, Ecole Normale Supérieure, Paris

2015-2016: Rossby visiting fellow, International Meteorological Institute, Stockholm

2008-2014: Senior lecturer, Geophysics Department, Tel Aviv University, Israel

2014: Visiting Scientist, Wizmann Institute, Israel

2005-: Adjunct scientist, Lamont Doherty Earth Observatory, Columbia University, NY

2004-2007: Lecturer, Geophysics Department, Tel Aviv University, Israel

2003-2004: Storke Doherty lecturer, Lamont Doherty Earth Observatory, Columbia University, NY

2001-2003: Postdoctoral researcher, Lamont Doherty Earth Observatory, Columbia University, NY

2000-2001: Postdoctoral researcher, Florida state university, FL / visiting scientist, MIT, MA

OTHER PROFESSIONAL ACTIVITIES

2020 - Co Editor Weather and Climate Dynamics

2020 - 2024: Member of the SPARC Scientific Steering Group

2015 - 2019: Secretary of the International Commission on Dynamical Meteorology (part of the IAMAS)

2008 - 2015: Member of the International Commission on Dynamical Meteorology

2013 - 2019 Member of Atmosphere Ocean Fluid Dynamics committee (part of AMS)

2015 - present: Co-Head of the Israeli Atmospheric and Climatic Data Center, at Tel Aviv University: http://www.iacdc.tau.ac.il

ACADEMIC AND PROFESSIONAL AWARDS

2004-2007 Alon Fellowship, Israeli Council for Higher Education (Tel Aviv, Israel)

2003-2004 Storke-Doherty Lecturer (New York, USA)

2001-2003 Lamont-Doherty postdoctoral fellowship (New York, USA)

1993-1994 Fulbright Grant, United States-Israel Educational Foundation

TEACHING EXPERIENCE

Undergraduate: Earth Sciences Lab course (experiments); Climate Theory; Theory of the General Circulation of the Atmosphere; Advanced Mathematical Methods; Atmospheric dynamics; Intro to Dynamic meteorology

Graduate: Preparation of Earth Science Experiments (graduate students built undergrad lab experiments); Middle Atmosphere dynamics; Statistical Observations of the Atmosphere; Yearly reading seminars on select topics in atmosphere and climate

PROPOSALS FUNDED - selection

- 2021-2024 EU Horizon 2020 ITN grant: European weather Extremes: Drivers, Predictability and Impacts (as part of a consortium of universities, research centres and private companies)
- 2018-2020 Indo-Israel joint research program: *Developing a Mechanistic Understanding of Moist Tropical Systems* (with Prof. Jai Sukhatme, Indian PI)
- 2017-2021 Israel Science Foundation, Dynamical regimes transitions of the global atmospheric circulation PI
- 2013-15 German Israeli Foundation, *Processes Controlling Stratospheric Dynamic Variability, and Implications for Ozone Levels and Downward Coupling to the Troposphere*, PI (with Prof. Katja Matthes, German PI)
- 2012-16 Israel Science Foundation, *The dynamical interactions between the tropical and extra-tropical circulations* PI
- 2009-13 US-Israel Binational Science Foundation, *The red sea trough as an instigator of tropical-extratropical interactions* (with Profs. E. Heifetz, S. Krichack, Israeli PI'S, S. Feldstein, American PI)
- 2008-11 Israel Science Foundation, A quasi-linear mechanistic understanding of dynamical regime transitions in nonlinear atmospheric models, PI
- 2006-09 Israel Science Foundation, A study on the basic mechanism of shear instability from the Counter-Propagating Rossby Wave perspective, CI

2005-07 Marie Curie International Reintegration Grant, PI

PROFESSIONAL COMPUTER ANALYSIS TOOL

Contributed to the conception and testing of GOAT 2013: Geophysical Observational Analysis Tool- A flexible MATLAB-based tool to analyze observations and model output, written by Dr. O. Adam during his postdoctoral research. http://www.goat-geo.org/.

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