

EDWIN P. GERBER

Professor of Mathematics and Atmosphere-Ocean Science
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RESEARCH INTERESTS

- Climate variability and change
- Atmospheric dynamics and circulation
- Stratosphere-troposphere interactions

EDUCATION

Princeton University, Princeton, NJ

Ph.D. in Applied and Computation Mathematics, 2006

Advisor: Geoffrey Vallis

Dissertation Committee: Isaac Held, Philip Holmes, and Paul Kushner

Fannie and John Hertz Foundation Fellowship, 2000 - 2005

The University of the South, Sewanee, TN

B.S. in Mathematics and Chemistry, 2000

Valedictorian, Class of 2000

RESEARCH EXPERIENCE

2008 to present **Courant Institute of Mathematical Sciences, New York University**
Professor (Associate Professor 2014-18, Assistant Professor 2008-14)

2011, **Max Planck Institute for Meteorology and Free University Berlin**
2014-2015 Visiting Scientist

Columbia University, New York NY
2006-2008 Postdoctoral Research Scientist with Professor Lorenzo M. Polvani,
Department of Applied Physics and Applied Mathematics

Princeton University/Geophysical Fluid Dynamics Laboratory, Princeton NJ
2002-2005 Research Assistant, Program in Applied and Computational Mathematics

2001 **Woods Hole Oceanographic Institute**, Woods Hole MA
Fellow in the Summer Program in Geophysical Fluid Dynamics

2000 **Institute for Defense Analysis, CCR-P**, Princeton NJ
SCAMP Summer Program in Mathematical Cryptology

1999 **Department of Defense**, Fort Meade MD, Director's Summer Program (Mathematics)

1998 **University of Vermont**, Burlington VT, REU Program in Chemistry

AWARDS

- 2021 **Bessel Research Award**, Alexander von Humboldt Foundation, Germany
2016 **Editor's Award**, J. Atmospheric Sciences, American Meteorological Society

TEACHING EXPERIENCE

- Courant Institute of Mathematical Sciences, New York University**
Graduate Courses: Atmospheric Dynamics, Climate Change, Climate Modeling,
2009 to Geophysical Fluid Dynamics, Synoptic Meteorology
present *Undergraduate Courses:* Calculus I and II, Linear Algebra, Ordinary Differential
Equations, Fundamental Dynamics of the Earth's Atmosphere and Climate,
The Science and Policy of Climate Change

RESEARCH SUPERVISION

Graduate Students

- David Connelly, 2021-present
Aman Gupta, Ph.D., 2020, now a postdoctoral scientist at LMU Munich
Kevin DallaSanta, Ph.D., 2019, now a postdoctoral fellow at NASA GISS
Naftali Cohen, Ph.D., 2014: now in industry
Xichen Li, Ph.D., 2014: now a Research Scientist a IAP, Chinese Academy of Sciences

Postdoctoral Research Scientists

- Madeleine Youngs, 2020-present
Martin Jucker, 2014-2016: now a lecturer at University of New South Wales, Australia
Changhyun Yoo, 2011-2014: now a professor at Ehwa University, Korea

PROFESSIONAL SERVICE

- 2013-
present **Associate Editor**, *Quarterly Journal of the Royal Meteorological Society*
2010-
present **Member of Scientific Steering Group and Co-chair (2013-19)**, DynVar (Dynamics
and Variability) Activity of the Stratosphere-Troposphere Processes and their Role in
Climate (SPARC) Project, World Climate Research Programme (WCRP)
2014-
present **Co-Chair**, DynVar Model Intercomparison Project (DynVarMIP) for the Coupled
Model Intercomparison Project, Phase 6 (CMIP6)
2014-
present **Member, Scientific Steering Group**, Model Intercomparison Project on the climate
response to Volcanic forcing (VolMIP) for CMIP6
2019-
present **Member**, International Commission on the Middle Atmosphere, for International As-
sociation of Meteorology and Atmospheric Science (IAMAS)
2012-17 **Chair**, Middle Atmosphere Committee, American Meteorological Society
2013-15 **Member, Scientific Steering Group**, WCRP SPARC

JURIED PUBLICATIONS

Please see <https://edwinpgerber.github.io/publications/>

CONFERENCE PRESENTATIONS AND SEMINARS

Please see <https://edwinpgerber.github.io/talks/>