

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

TEACHING EXPERIENCE

Courant Institute of Mathematical Sciences, New York University

2009 to present **Graduate Courses:** Atmospheric Dynamics, Climate Modeling, Geophysical Fluid Dynamics, Synoptic Meteorology
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

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 Association of Meteorology and Atmospheric Science (IAMAS)
2012-17 **Chair**, Middle Atmosphere Committee, American Meteorological Society
2013-15 **Member, Scientific Steering Group**, WCRP SPARC
2011, 18 **Panel Member**, National Science Foundation

JURIED PUBLICATIONS

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

CONFERENCE PRESENTATIONS AND SEMINARS

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