

EDWIN P. GERBER

Associate Professor

Center for Atmosphere Ocean Science, Department of Mathematics
Courant Institute of Mathematical Sciences

New York University

251 Mercer Street, New York, NY 10012

gerber@cims.nyu.edu, 212.998.3269 (phone), 212.995.4121 (fax),

<https://cims.nyu.edu/~gerber/>

RESEARCH INTERESTS

- Climate variability on intraseasonal to interannual time scales
- Anthropogenic impacts on climate
- 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**
Associate Professor (2014-present), Atmosphere Ocean Science and Mathematics
Assistant Professor (2008-2014), Atmosphere Ocean Science and Mathematics
- 2011, 2014-2015 Visiting Scientist at the **Max Planck Institute for Meteorology**, Hamburg Germany,
and **Free University Berlin**
- 2006-2008 **Columbia University**, New York NY
Postdoctoral Research Scientist with Professor Lorenzo M. Polvani,
Department of Applied Physics and Applied Mathematics
- 2002-2005 **Princeton University/Geophysical Fluid Dynamics Laboratory**, Princeton NJ
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, Fundamental Dynamics of the Earth's Atmosphere and Climate, The Science and Policy of Climate Change
- Community Impact at Columbia University, New York NY**
2006-2008 GED (General Educational Development) mathematics instructor; taught algebra and geometry to adults preparing for high school equivalency exams
- Princeton University, Princeton NJ**
2002 Lecturer for the Mathematics Department; taught calculus

RESEARCH SUPERVISION

Graduate Students

- Kevin DallaSanta, 2015-present
Aman Gupta, 2015-present
Megan Lytle, M.S., 2016
Naftali Cohen, Ph.D., 2014: now in industry
Xichen Li, Ph.D., 2014: now a Research Scientist a IAP, Chinese Academy of Sciences
Ho Yeung Hung, M.S., 2014

Postdoctoral Research Scientists

- 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*
- 2013-15 **Member, Scientific Steering Group**, World Climate Research Programme's (WCRP) Stratosphere-Troposphere Processes and their Role in Climate (SPARC) Project
- 2010-present **Co-Chair (since 2013) and Member of Scientific Steering Group**, DynVar (Dynamics and Variability) Activity of SPARC and the DynVar Model Intercomparison Project
- 2012-17 **Chair**, Middle Atmosphere Committee, American Meteorological Society
- 2014-present **Member, Scientific Steering Group**, VolMIP (Model Intercomparison Project on the climate response to Volcanic forcing)
- 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/>