# Michael F. Wehner

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### **Education:**

Ph.D., 1983, University of Wisconsin-Madison (Nuclear Engineering) M.S., 1980, University of Wisconsin-Madison (Nuclear Engineering) B.S., 1978, University of Delaware, Graduated with High Honors (Physics)

### **Dissertation:**

Numerical Evaluation of Path Integral Solutions to Fokker-Planck Equations (Advisor: Professor W.G. Wolfer)

### **Research Interest Statement:**

Future climate change is an issue of great social importance. Uncertainties in predictions of this change are due to limitations in our ability to model such a complex phenomena as well as the intrinsic chaotic nature of the climate system. High performance computing offers a chance to quantify both of these sources of uncertainty via ensemble integrations of high-resolution climate models. My principal research interests are to exploit the high levels of parallelism in such integrations and to advance the level of sophistication within the coordinated US climate modeling effort. I have a particular interest in characterizing the effect of future climate change on extreme weather events as well as exploiting novel technologies to enable new classes of climate simulations.

# **Professional Employment:**

2013-present: Senior Staff Scientist, Scientific Computing Group, Computational Research Division, Lawrence Berkeley National Laboratory, Berkeley, CA

2002-2013: Staff Scientist, Scientific Computing Group, Computational Research Division, Lawrence Berkeley National Laboratory, Berkeley, CA

1998-2002: Physicist, Program for Climate Modeling and Intercomparison, Lawrence Livermore National Laboratory, Livermore, CA

1991-1998: Physicist, Climate System Modeling group, A-division, Lawrence Livermore National Laboratory, Livermore, CA

1985-1991: Physicist, Code Development group, B-division, Lawrence Livermore National Laboratory, Livermore, CA

1983-1984: Post doctoral Research Associate, Nuclear Engineering Department, University of Wisconsin-Madison

### **Professional Activities:**

Member of Lead Author team, US Global Change Research Program,  $2^{\rm nd},\!3^{\rm rd}$  and  $4^{\rm th}$  US National Climate Assessment Reports 2009-2017

Founding board member of the Atmospheric River Tracking Method Intercomparison Project (2016-present)

Chief Scientific Editor and co-founder, Advances in Statistical Meteorology, Climatology and Oceanography. A Copernicus journal. 2014-present

Chair, Ad-Hoc International Detection and Attribution Group (IDAG), 2010-present

Member of Lead Author team, Intergovernmental Panel on Climate Change 5<sup>th</sup> Assessment Report (IPCC AR5), chapter 12, *Long Term Projections* (2010-2014)

Chapter 14 Lead, US Government IPCC AR5 Review Committee (2012)

Member of Lead Author team, US Climate Change Science Program Synthesis and Assessment Report 3.3, "Weather and Climate Extremes in a Changing Climate. Regions of Focus: North America, Hawaii, Caribbean, and U.S. Pacific Islands." 2008

Review Panel Member, NASA Modeling, Analysis and Prediction Program 2008

Review Panel Member, NOAA Climate Change Data and Detection Program 2009, 2010

Review Panel Member, DOE Climate Change Prediction Program, Regional Climate Change 2009, 2010

Review Panel Member, DOE INCITE Program 2008, 2009, 2010

Review Panel Member, National Science Foundation 2009, 2011, 2012

Testified before the House Select Committee on Energy Independence and Global Warming at the briefing "Extreme Weather in a Warming World" September 23, 2010.

Member, Climate Science Rapid Response Team, 2010-present

Awarded 2010 Editors' Citation for Excellence in Refereeing for Geophysical Review Letters

Member, Climate Science Working Group of the National Climate Assessment Development and Advisory Committee, 2011-2012