MARK PETER RAST

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Education:

1979 BA (Philosophy) University of California, Davis

1987 BA (Physics) University of California, Santa Cruz

1992 PhD (Astrophysical, Planetary, and Atmospheric Sciences)
University of Colorado, Boulder

Career Sketch:

Rast received a BA degree in philosophy with honors from the University of California, Davis in 1979. He subsequently worked for the Federal Aviation Administration as an air traffic control specialist before pursuing and receiving a BA degree in physics with highest honors from the University of California, Santa Cruz in 1987. Rast then entered the graduate program at the University of Colorado, Boulder in the Department of Astrophysical, Planetary and Atmospheric Sciences. During the six month period of January – June 1990 he participated in the Institute for Theoretical Physics Program on "Helioseismology – Probing the Interior of a Star" at the University of California, Santa Barbara. Graduate work was completed in 1992 with the successful defense of a PhD thesis entitled "Compressible Convection with Ionization." Rast then moved to the University of Leeds, England as a research fellow in biophysical fluid dynamics, and from there to a two year postdoctoral position in the Advance Study Program at the National Center for Atmospheric Research. After two years as a research associate at the Joint Institute for Laboratory Astrophysics, Rast joined the scientific staff of the High Altitude Observatory at the National Center for Atmospheric Research. In 2006 he joined the faculty of University of Colorado, Boulder. His research interests include theory, modeling, and observation of solar convective dynamics and scale selection, turbulent transport, the excitation of solar and stellar oscillations, and the origin of solar/stellar irradiance variations. He served as the instrument scientist for the Precision Solar

Photometric Telescope (PSPT) at Mauna Loa Solar Observatory (MLSO) over its period of operation from 1999 to 2015, and is currently chair of the Daniel K. Inouye Solar Telescope (DKIST) Science Working Group.

Teaching and Research Positions:

2006 – present	Associate Professor, Laboratory for Atmospheric and Space Physics, Department of Astrophysical and Planetary Sciences
2007 – present	Affiliate Scientist, High Altitude Observatory, National Center for Atmospheric Research
1998 – present	Member, Geophysical Turbulence Program, National Center for Atmospheric Research
2011 – 2014	Professeur Invité, Laboratoire de Physique, École normale supérieure de Lyon, Centre national de la recherche scientifique
2010 – 2012	Affiliate, Renewable and Sustainable Energy Institute, A Joint Institute of the University of Colorado and the National Renewable Energy Laboratory
2004 – 2005	Scientist III (tenure equivalent), High Altitude Observatory, National Center for Atmospheric Research
2001 – 2003	Scientist II, High Altitude Observatory, National Center for Atmospheric Research
1998 – 2000	Scientist I, High Altitude Observatory, National Center for Atmospheric Research
1997	Instructor, Front Range Community College
1995 – 1997	Research Associate, Joint Institute for Laboratory Astrophysics, University of Colorado, Boulder
1993 – 1995	Postdoctoral Fellow, Advanced Study Program, National Center for Atmospheric Research
3/93 – 10/93	Research Fellow, Department of Applied Mathematical Studies, University of Leeds
1992 – 1993	Research Associate, Joint Institute for Laboratory Astrophysics, University of Colorado, Boulder
1988 – 1992	Research Assistant, Joint Institute for Laboratory Astrophysics, University of Colorado, Boulder
1/90 – 6/90	Affiliate Visitor, Institute for Theoretical Physics, University of California, Santa Barbara
1987 – 1990	Teaching Assistant, Department of Astrophysical, Planetary and Atmospheric Sciences, University of Colorado, Boulder

Publications:

Rast, M.P. 1979, *An Artificial Phenomenological Ensemble*.

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Rast, M.P. and Pinton J.-F. 2011, "Turbulent dispersion in a point vortex flow: a limited role for scaling" (Abstract), *AGU Fall Meeting*, #NG43B-1480.

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