# 2017 AWARDS



The objective of this Society is to advance the atmospheric and related sciences, technologies, applications, and services for the benefit of society. The Society shall be a nonprofit organization, and none of its net income or net worth shall inure to the benefit of its members. Its membership and activities shall be international in scope.

These awards are given because people took the time to submit a nomination for a qualified individual by following the procedures at www.ametsoc.org/awards.

Society awards are presented at the Annual Meeting, specialized conferences, or other appropriate occasions during the years.

### **American Meteorological Society**

45 Beacon Street, Boston, Massachusetts 02108 617-227-2425 amsmem@ametsoc.org www.ametsoc.org

# 97<sup>th</sup> Annual Review, New Fellows, and Featured Awards

Sunday, 22 January 2017





#### MARY C. BARTH

Senior Scientist, National Center for Atmospheric Research, Boulder, Colorado.

Mary Barth is a Senior Scientist at the National Center for Atmospheric Research, where she leads the group on Regional and Process Modeling for atmospheric chemistry. Barth

has led modeling and field measurement studies examining how clouds affect trace gases and aerosols via scavenging and chemistry, how aerosols affect convective storms, and atmospheric chemistry in South and Southeast Asia. She received her Ph.D. in Atmospheric Sciences from the University of Washington.



### **DAVID GRIMES**

Assistant Deputy Minister, Meteorological Service of Canada, Toronto, Ontario, Canada, and President, World Meteorological Organization, Geneva, Switzerland.

David Grimes has been Assistant Deputy Minister and head of the Meteorological

Service of Canada since 2006. During his over 40-year career, he has held a number of leadership positions in scientific, operations, research, policy, and management domains. David has mentored many over these years. Since 2011, David has been President of the World Meteorological Organization, recognized for his effective leadership in advancing global collaborative scientific efforts in the fields of weather, climate and water.



# WILLIAM J. GUTOWSKI, JR.

Professor and Associate Dean for Research, College of Liberal Arts and Sciences, Iowa State University, Ames, Iowa.

Dr. Gutowski is an Associate Dean for Research at Iowa State University. His research covers the hydrologic cycle,

regional climate and extreme events, for which he has authored or co-authored over 100 peer-reviewed publications, including reports of the IPCC and the National Academy of Sciences. Dr. Gutowski is currently Co-Chair of the Science Advisory Team for the WCRP's Coordinated Regional Downscaling Experiment (CORDEX). He has also served as an Editor for the *Journal of Hydrometeorology*.



#### THOMAS M. HAMILL

Meteorologist, NOAA, Boulder, Colorado.

Tom Hamill performs, coordinates, and leads weather R&D in NOAA, specifically the improvement of ensemble prediction, data assimilation, and statistical post-processing systems necessary to improve

probabilistic weather predictions on time scales of days to a month. Hamill and team members develop these research methods, demonstrate their suitability for operational use, and then work with colleagues in the National Weather Service to adapt them for regular use. Hamill lives with his wife and son in Boulder, Colorado.



#### PATRICK A. HARR

Head, Atmospheric Sciences Section, Directorate of Geosciences, National Science Foundation, Arlington, Virginia.

Pat Harr recently joined the National Science Foundation as the Atmospheric Science Section Head from the faculty of the Naval Postgraduate

School. His research interests are in tropical meteorology, tropical cyclones, tropical – extratropical interaction, midlatitude synoptic-dynamic meteorology, and applied statistics. He served as lead investigator for several international field campaigns on tropical cyclones and has served as an Editor of *Monthly Weather Review* and Chair of the Committee on Hurricanes and Tropical Meteorology.



### TERENCE F. KELLY

President, Venture Management, LLC, Madison, Wisconsin.

Terry Kelly is a UW-Madison meteorology graduate and has enjoyed an extended on-air television career, holding an AMS Seal of Approval and earning the AMS Award for

Outstanding Service by a Broadcast Meteorologist. Terry has founded three companies pioneering the development and onair use of computer weather graphics systems and proprietary ultrafine grid point weather data and forecasts. Over 500 television stations and networks worldwide now use these tools to explain and forecast the weather.



# **ZHANQING LI**

Professor, Atmospheric and Oceanic Department and ESSIC, University of Maryland, College Park, Maryland.

Zhanqing Li is a professor at the University of Maryland (since 2001). He has received his Ph.D. (1991, Canada), BSc (1983) and MSc (1986)

(China). He has engaged in studies on remote sensing, atmospheric physics, climate, atmospheric and terrestrial environments focusing on aerosol, cloud, radiation budget, precipitation and biomass burning. He has authored 240 peerreviewed articles, received numerous awards from U.S., Canada and Germany. He is a fellow of AMS, AGU & AAAS, an editor of *Journal of Geophysical Research* and guest-editor of *Journal of Atmospheric Chemistry & Physics*.



# MICHAEL C. Maccracken

Chief Scientist, Climate Change Programs, Climate Institute, Washington, DC.

Mike has volunteered as Chief Scientist for Climate Change Programs with the Climate Institute since retiring from the Lawrence Livermore

National Laboratory in October 2002. From 1968-93 he led the Laboratory's modeling studies of the climatic effects of nuclear war, greenhouse gases, and other forcings. From 1993-97, he was the first executive director of the interagency Office of the U.S. Global Change Research Program and from 1997-2001 executive director of their National Assessment Coordination Office.



# GREG MCFARQUHAR

Professor, Department of Atmospheric Sciences, University of Illinois, Urbana, Illinois

Greg McFarquhar is a professor at the University of Illinois. Since receiving his Ph.D. from Toronto in 1993, he has published 133 papers,

supervised 30 graduate students, and participated in 28 field campaigns. He was chair of the AMS Committee on Cloud Physics and is currently Vice-President of the International Commission on Clouds and Precipitation. His research examines the impact of cloud processes on weather and climate using aircraft and remote sensing observations, and models.



### THOMAS MOTE

Distinguished Research Professor of Geography, University of Georgia, Athens, Georgia.

Thomas Mote is a Distinguished Research Professor of Geography at the University of Georgia, where he served as the founding director

for the Program in Atmospheric Sciences. His research involves the application of satellite remote sensing to understand the impact of climate change and variability on the cryosphere, particularly as related to the mass balance of the Greenland ice sheet, and assessing the regional to local-scale impacts of climate change on precipitation extremes.



## JOHN D. MURPHY

Chief Operating Officer, NOAA/National Weather Service, Silver Spring, Maryland.

John D. Murphy is Chief Operating Officer (COO) of the National Weather Service (NWS). He has overall responsibility for day-to-day

mission execution units responsible for delivering weather, water, climate, and space weather products, services, and information as well as the budgetary planning for 11 National Service Programs. Mr. Murphy came to the NWS in 2011 after serving more than 29 years with the United States Air Force as a career meteorologist.



#### PETER P. NEILLEY

Senior Vice President of Global Forecasting Sciences for The Weather Company and IBM Distinguished Engineer, Andover, Massachusetts.

Peter Neilley is an IBM Distinguished Engineer and Senior VP for The Weather Company, where he oversees

the creation of next-generation weather technologies. Before TWC, he was a NCAR scientist. He earned his B.S. from McGill University, and Masters and Ph.D. degrees from MIT. Dr. Neilley was a long-time member/chair of the AMS WAF Committee. He currently is co-chair of the UCAR Community Advisory Committee for NCEP (UCACN), and the NCEP Modelling Advisory Committee (UMAC).



### JUDITH PERLWITZ

Research Scientist, NOAA/ ESRL Physical Sciences Division and CIRES/University of Colorado, Boulder, Colorado.

Judith Perlwitz is a Research Scientist at NOAA/ESRL Physical Sciences Division and CIRES/University of Colorado,

Boulder, Colorado. She served as Editor of *Journal of Climate*, the AMS Middle Atmosphere Committee, and Lead Author of the IPCC AR5. Dr. Perlwitz is currently serving as Co-Chair of the WCRP Core Project on Stratosphere-Troposphere Processes and their Role in Climate (SPARC).

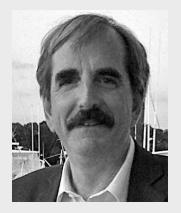


#### RUI M. PONTE

Principal Scientist and Leader, Atmosphere, Ocean, and Climate Section, AER, Inc., Lexington, Massachusetts.

Ponte is Principal Scientist and Leader of the Atmosphere, Ocean and Climate Section at AER in Lexington, MA. His research interests include

sea level, ocean circulation and climate, in relation to the Earth's rotation and gravity. Ponte was a member of TOPEX/POSEIDON and GRACE satellite teams that won the NASA/DOI Pecora Award in 1998 and 2007. He received his Ph.D. in Physical Oceanography from MIT and the Woods Hole Oceanographic Institution in 1988.



#### HENRY E. REVERCOMB

Senior Scientist, Space Science and Engineering Center, University of Wisconsin-Madison, Madison, Wisconsin.

Dr. Hank Revercomb, director of the UW-Madison, Space Science and Engineering Center (SSEC) for the last 17 years, has carried on the

SSEC traditions established by Professor V. E. Suomi. He has been a leader in using radiation measurements to study the atmospherics of the earth and other planets. Specialties include: high spectral resolution instrumentation for atmospheric remote sensing and spectroscopy, operational infrared sounders, climate observing systems, and net flux observations of Venus and Jupiter.



# CAROLYN A. REYNOLDS

Lead Scientist, Probabilistic Prediction Research Office, National Research Laboratory, Monterey, California.

Carolyn Reynolds has worked at the Naval Research Laboratory, Monterey, California, since receiving her

Ph.D. in Meteorology from Penn State in 1993. She headed NRL's global modeling section from 2005-2014 and currently leads the Probabilistic Prediction Research Office and NRL Monterey's Earth System Prediction Capability effort. She has served on AMS and other committees and is a *Monthly Weather Review* editor. She has over 60 peer-reviewed publications on ensemble design, predictability, and adjoint applications.

#### **ELECTED FELLOWS**



#### WALTER A. ROBINSON

Professor, Department Marine, Earth, and Atmospheric Sciences, North Carolina State University, Raleigh, North Carolina.

Walt Robinson is a professor of Atmospheric Sciences at NC State University. His research addresses the large-scale

dynamics of climate variability and change. He received B.S./ M.S. degrees in physics from the University of Pennsylvania and his Ph.D. in Geological Sciences from Columbia University for research at NASA's Goddard Institute of Space Studies. He has served as a program director at the National Science Foundation and currently is co-chief editor of the *Journal of the Atmospheric Sciences*.



### **ROBERT SHARMAN**

Project Scientist, National Center for Atmospheric Research, Boulder, Colorado.

Bob Sharman is a project scientist at the Research Applications Laboratory, National Center for Atmospheric Research. He received his Ph.D.

in atmospheric sciences from UCLA. His research interests include upper-level gravity waves and turbulence characterization using high resolution fluid dynamical numerical simulations. He has developed an automated aviation turbulence forecasting system that is in use by the aviation user community. He is a recipient of the SCIENTIFIC AMERICAN Top 50 Scientists Award for 2003.



# CHRISTOPHER D. THORNCROFT

Professor and Chair, Department of Atmospheric and Environmental Sciences, University at Albany, SUNY, Albany, New York.

Chris Thorncroft received his Ph.D. from the University of Reading (U.K.) in 1988. He is a

Professor in the Department of Atmospheric and Environmental Sciences, at the University at Albany, SUNY. His research is concerned with improving our understanding of the processes that determine the nature and variability of the West African monsoon system, including how this impacts Atlantic tropical cyclones. The research spans a wide range of timescales from diurnal-to-multidecadal and including climate change.



#### **DANIEL WILKS**

Professor, Department of Earth and Atmospheric Sciences, Cornell University, Ithaca, New York.

Daniel Wilks is Professor in the Department of Earth and Atmospheric Sciences at Cornell University. He has published more than

100 peer-reviewed papers addressing various applications of probability and statistics in weather and climate, including ensemble postprocessing, stochastic parameterizations, seasonal forecasting, statistical downscaling, statistical simulation, forecast verification, and various topics in statistical inference. He is the author of the book <u>Statistical Methods in the Atmospheric Sciences</u>.



#### **CHUN-CHIEH WU**

Distinguished Professor, Department of Atmospheric Sciences, National Taiwan University, Taipei, Taiwan.

Prof. Chun-Chieh Wu received his Ph.D. from MIT in 1993. He is a distinguished professor in the Department of Atmospheric Sciences, National Taiwan

University. His research foci are tropical cyclone dynamics and targeted observation. Prof. Wu is serving as the Secretary General of Asia Oceania Geoscience Society, Vice President of Meteorological Society of Taiwan, member of the Committee of Tropical Meteorology and Tropical Cyclones of AMS, and Editor of the *Journal of the Atmospheric Sciences*, AMS.



### **SHANG-PING XIE**

Roger Revelle Professor, Scripps Institution of Oceanography, University of California San Diego, La Jolla, California.

Shang-Ping Xie studies ocean-atmosphere interactions, climate variability and change. He received his bachelor's

degree from Ocean University of China (1984) and doctorate from Tohoku University (Japan, 1991), previously taught at Hokkaido University (Japan) and University of Hawaii. He has published about 300 research papers, was a lead author of the IPCC Fifth Assessment Report (2013), and served as a *Journal of Climate* editor (2006-2010). He is a Thompson-Reuters highly-cited researcher and AGU fellow.



#### YONGKANG XUE

Professor, Department of Geography and Department of Atmospheric and Oceanic Sciences, the University of California, Los Angeles, California.

Yongkang Xue is a professor at the Department of Geography and the Department of

Atmospheric & Oceanic Sciences, the University of California, Los Angeles. He has been instrumental in the development of four generations of the "SSiB" land surface scheme for the Earth system modeling and investigates the impact of land/atmosphere/ocean feedback processes on climate variability and anomalies, including land's interactions with monsoon system as well as spring mountain land temperature anomaly on downstream summer drought/flood.



#### SANDRA E. YUTER

Professor, Department of Marine, Earth, and Atmospheric Sciences, North Carolina State University, Raleigh, North Carolina.

Sandra Yuter combines remote sensing and in situ observations to explore the joint interactions of dynamical and microphysical

processes within clouds. Her research foci include marine low clouds, snow storms, orographic precipitation, and deep convection. She has led four field projects and several multi-year field observatories. Dr. Yuter is a professor of atmospheric sciences in the Department of Marine, Earth, and Atmospheric Sciences at North Carolina State University.



#### SHIYUAN ZHONG

Professor, Department of Meteorology-Climatology, Michigan State University, East Lansing, Michigan.

Shiyuan Zhong is a professor of meteorology-climatology at Michigan State University. Much of her research focus has been on understanding

boundary-layer processes and their roles in many applications, including air pollution, fire behavior, wind energy, and regional climate. She has an extensive publication record on these topics, with a balance in both field and numerical studies. She has served as an editor for the *Journal of Applied Meteorology and Climatology* for eight years, and is a proud mother of two daughters.



#### W. DAVID ZITTEL

Meteorologist, NOAA/NWS/ Office of Observations (OBS)/ Radar Operations Center (ROC)/Applications Branch, Norman, Oklahoma.

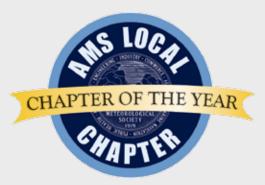
A University of Washington (1970) graduate, David Zittel pioneered radar data display techniques at NSSL, laying

the groundwork for successful automated echo tracking. For 35+ years, he has held key roles in the NEXRAD program adapting and testing new algorithms and assuring data quality associated with radar upgrades, especially velocity dealiasing, super-resolution, and dual polarization. Recently, he has refined techniques to measure dual polarization ZDR calibration using returns from rain, snow, Bragg scatter, and sunspikes.

# THE AWARD FOR OUTSTANDING CHAPTER OF THE YEAR

#### WEST CENTRAL FLORIDA

Tampa, Florida

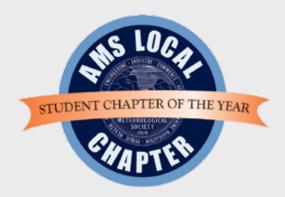


For continued service to the community through outreach and volunteering, and for dedicated commitment to membership and networking opportunities

# THE AWARD FOR OUTSTANDING STUDENT CHAPTER OF THE YEAR

#### UNIVERSITY OF LOUISIANA AT MONROE

Monroe, Louisiana



For service to the community, including a dedicated response to the catastrophic 2016 floods in Louisiana, and commitment to providing opportunities for members

# THE AWARD FOR AN EXCEPTIONAL SPECIFIC PREDICTION

# NOAA NATIONAL WEATHER SERVICE FORECAST OFFICE

Taunton, Massachusetts



For exceptional forecast services in connection with the record-breaking series of winter storms that impacted eastern Massachusetts from late January through February 2015

### THE LOUIS J. BATTAN AUTHOR'S AWARD

#### **HOLLY BAILEY**

Correspondent, Yahoo News, New York, New York.



For Mercy of the Sky: The Story of a Tornado, in which she promotes tornado awareness and preparedness through storytelling of a recent event in an absorbingly and meteorologically informative style

Holly Bailey is a national correspondent for Yahoo News based in New York, where

she covers news, politics and culture. She previously worked for Newsweek Magazine, where she was a White House correspondent covering the presidencies of George W. Bush and Barack Obama. A native of Oklahoma City, she wrote her first book, <u>The Mercy of the Sky</u>, about severe weather in her home state.

### THE LOUIS J. BATTAN AUTHOR'S AWARD K-12

#### THOMAS M. KOSTIGEN

Author and Journalist, Los Angeles, California.



For Extreme Weather, whose fascinating and insightful scientific content and visually stimulating imagery encourage readers to understand and prepare for severe weather of all kinds

Thomas M. Kostigen is a New York Times bestselling author and journalist. He has written numerous books on the

environment, as well as two novels. He contributes to major publications worldwide as a columnist and writer-at-large, and has reported from war zones to the world's wonders across five continents. Kostigen speaks widely at conferences and events around the globe, and appears regularly as a guest in the media and television host.

#### THE BANNER I. MILLER AWARD

#### DAVID S. NOLAN, ROBERT M. ATLAS, KIERAN T. BHATIA, AND LISA BUCCI

For their paper, "Development and validation of a hurricane nature run using joint OSSE nature run and the WRF model"



DAVID S. NOLAN, Professor, University of Miami, Miami, Florida.

Dave Nolan earned a B.A. in Physics in 1990 and a Ph.D. in Earth and Planetary Sciences in 1996, both from Harvard University. He held post-doc

and scientist positions at Berkeley, Colorado State, and Princeton, before becoming a faculty member at the Rosenstiel School of Marine and Atmospheric Sciences. He is currently Chair of the Department of Atmospheric Sciences.



ROBERT M. ATLAS, Director, NOAA Atlantic Oceanographic and Meteorological Laboratory, Miami, Florida.

Dr. Atlas received his Ph.D. in Meteorology and Oceanography in 1976 from New York University.

In 1978, Dr. Atlas joined NASA as a research scientist. He served as head of the NASA Data Assimilation Office, and as Chief meteorologist at NASA GSFC, and was a key member of the team that first demonstrated the significant impact of quantitative satellite data on numerical weather prediction. He is currently director of NOAA AOML in Miami, Florida



KIERAN T. BHATIA, Postdoctoral Research Associate, Princeton University, Princeton, New Jersey.

Kieran Bhatia received his Ph.D. in Meteorology and Physical Oceanography at the University of

Miami in 2015. He is originally from the Washington, D.C. area and received a B.S. in Physics from the University of Maryland at College Park. He is currently a postdoctoral research associate at Princeton University where he is researching how hurricane impacts will respond to a changing climate.



LISA BUCCI, Senior Research Associate, University of Miami, CIMAS, Miami, Florida. Lisa Bucci is a Senior Research Associate and Ph.D. candidate at the University of Miami's Cooperative Institute contracted to NOAA's

Hurricane Research Division. Her research interests include performing and evaluating regional observing system simulation experiments and is a frequent flyer in HRD's annual hurricane field program. Lisa holds degrees from the University of Michigan and Florida State University.

### **Bulletin of the American Meteorological Society**

#### **JOHN R. ALBERS**

Research Scientist, CIRES, University of Colorado, ESRL/NOAA, Boulder, Colorado.



For outstanding effort to identify key criteria to be satisfied by a proposed manuscript and detailed comments that greatly improved it

John Albers is a research scientist at the Cooperative Institute for Research in the Environmental Sciences (CIRES) at the University of

Colorado-Boulder. He received his undergraduate degrees at the University of Wisconsin-Madison (Atmospheric Science and Applied Mathematics), his Ph.D. at the University of California-Davis (Atmospheric Science), and was a National Science Foundation Postdoctoral Fellow at CIRES-NOAA ESRL. His interests include large-scale dynamics, low-frequency variability, stratospheric chemistry, and stratosphere-troposphere communication.

#### **EDITOR'S AWARD**

Journal of Hydrometeorology

### BENJAMIN F. ZAITCHIK

Assistant Professor, Department of Earth and Planetary Sciences, Johns Hopkins University, Baltimore, Maryland.



For thorough, timely reviews of several manuscripts, considerably improving their scientific quality and thereby helping maintain the high standards of the journal

Benjamin Zaitchik is an Assistant Professor at Johns Hopkins University. His research addresses hydroclimatic variability across

a range of spatial and temporal scales. Prior to joining JHU, Ben was a Research Associate at NASA Goddard Space Flight Center and a AAAS Fellow at the U.S. Department of State. He holds a Ph.D. in Geology & Geophysics from Yale University, an M.S. in Soil Sciences from Cornell University, and a B.A. in Biology from Harvard College.

Weather and Forecasting

#### RICHARD L. THOMPSON

Lead Forecaster, Storm Prediction Center, Norman, Oklahoma.



For careful, thorough, and constructive reviews that have maintained the high scientific standards of the journal

I was born in Houston, Texas, and have been interested in the weather my entire life. After graduating with an M.S. in meteorology from the University of Oklahoma in 1992, I began my career with

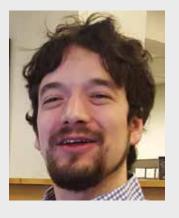
the National Weather Service. The past 22 years have been spent with the Storm Prediction Center in Norman, Oklahoma.

#### **EDITOR'S AWARD**

**Journal of Climate** 

### **JACOB SCHEFF**

Postdoctoral Research Scientist, Lamont-Doherty Earth Observatory of Columbia University, Palisades, New York.



For thorough and very constructive reviews provided in a timely fashion

Jacob (Jack) Scheff works on hydroclimate change and climate dynamics past, present and future, using models, theory and observations. He was an NSF Atmospheric & Geospace Sciences postdoctoral fellow at Lamont-Doherty

during 2015 and 2016, and received his Ph.D. in Atmospheric Sciences from the University of Washington in 2014. Jack has greatly enjoyed all of his reviews for AMS journals.

**Journal of Climate** 

### JAMES KOSSIN

Atmospheric Scientist, NOAA's Center for Weather and Climate, National Centers for Environmental Information (NCEI), College Park, Maryland.



For careful, thoughtful, and insightful reviews that significantly improved the quality of manuscripts

Jim Kossin is an atmospheric scientist in NOAA's Center for Weather and Climate, which is part of the National Centers for Environmental Information (NCEI). His research focuses on tropical cyclone and climate

interactions, and he is active in the U.S. national (NCA) and international (IPCC) climate assessment reporting process.

#### **EDITOR'S AWARD**

Journal of Atmospheric and Oceanic Technology

#### IAN SIMMONDS

Professor, The University of Melbourne, Melbourne, Australia.



For careful and insightful reviews of numerous manuscripts

Ian Simmonds is Professor of Atmospheric and Oceanic Sciences at The University of Melbourne, Australia. He has a broad range of interests including meteorology, climatology, and oceanography. Specific areas are climate

variability and change, air-sea interaction, data analysis, Antarctic circulation, urban climates, and Arctic and Antarctic sea ice. He has published over 170 scientific articles in the fully-refereed international literature, and these have been cited in excess of 6000 times in the Web of Science.

**Monthly Weather Review** 

#### TAKEMASA MIYOSHI

Team Leader, RIKEN Advanced Institute for Computational Science, Kobe, Japan.



For prompt and detailed reviews of a large number of manuscripts

Takemasa Miyoshi received the Ph.D. degree in meteorology from the University of Maryland, College Park, Maryland. He leads the Data Assimilation Research Team at the RIKEN Advanced Institute for Computational Science,

Kobe, Japan; is a Visiting Professor in the Department of Atmospheric and Oceanic Science, University of Maryland; and is a Visiting Senior Scientist in the Application Laboratory, Japan Agency for Marine-Earth Science and Technology, Yokohama, Japan. His research interests include numerical weather prediction and data assimilation.

#### **EDITOR'S AWARD**

**Monthly Weather Review** 

#### ELIZABETH SATTERFIELD

Meteorologist, Naval Research Laboratory, Monterey, California.



For providing thorough, constructive, and insightful reviews in a timely manner

Dr. Elizabeth Satterfield joined NRL's Marine Meteorology Division in 2012. She holds a B.S. degree from Georgia Tech, an M.S. degree from the University of Maryland, and a Ph.D. from Texas A&M University. She is a recipient of

the Karles fellowship (2012) and an Alan Berman publication award (2014). Dr. Satterfield currently serves as vice chair of the AMS Probability and Statistics Committee. Her research interests include ensemble predictability, ensemble post-processing, and data assimilation.

Journal of Physical Oceanography

#### **SONYA LEGG**

Senior Research Oceanographer, Princeton University, Princeton, New Jersey.



For clear and concise reviews of manuscripts, mainly involving interactions among internal waves and topography

Sonya Legg received her Ph.D. in physical oceanography from Imperial College in 1993, and following a NOAA Climate and Global Change postdoctoral fellowship, spent seven years as a scientist at the Woods Hole

Oceanographic Institution. She is currently a senior research oceanographer in the Atmospheric and Oceanic Sciences program at Princeton University, collaborating closely with the NOAA Geophysical Fluid Dynamics Laboratory. Her research focuses on small-scale mixing in the ocean, including breaking internal waves.

#### **EDITOR'S AWARD**

Journal of Physical Oceanography

#### **CHRIS FAIRALL**

Physicist, NOAA/ESRL, Boulder, Colorado.



For timely and insightful reviews of manuscripts on the science and technology of air-sea interaction and its measurement

Chris Fairall is a physicist at NOAA's Earth System Research Laboratory in Boulder, Colorado, where he heads the Boundary Layer Observations and Processes

team. He works in unraveling the mysteries of how the ocean and atmosphere battle as part of the Earth's climate system from El Niño to hurricanes. He has spent decades developing and deploying air-sea interaction observing systems for NOAA ships and aircraft and has participated in nearly 70 research field programs.

### Journal of Applied Meteorology and Climatology

#### GEORGE S. YOUNG

Professor, The Pennsylvania State University, State College, Pennsylvania.



For constructive and respectful reviews of multiple manuscripts that significantly improved the reported research and its presentation

Dr. Young received his B.S. and M.S. from Florida State and his Ph.D. from Colorado State. Since then he has been on the faculty of Penn State.

#### **EDITOR'S AWARD**

### Journal of Applied Meteorology and Climatology

#### SCOTT ELLIS

Project Scientist, NCAR Earth Observing Laboratory, Boulder, Colorado.



For consistently excellent reviews

Scott Ellis is a radar meteorologist in the National Center for Atmospheric Research's Earth Observing Laboratory. His research focuses on data quality for both research and operational radars and developing algorithms to retrieve physical quantities

from radar data. He works with dual-polarization and multiplewavelength radars, both ground-based and airborne. Scott has supported more than 20 field campaigns and contributed to the development of data quality algorithms utilized by the NEXRAD radar network.

Journal of the Atmospheric Sciences

#### DANIEL P. STERN

UCAR Visiting Scientist, Naval Research Laboratory, Washington, DC.



For many insightful and thorough reviews of manuscripts on tropical cyclone dynamics

Dr. Stern studies the structure and dynamics of tropical cyclones, from observational, numerical, and theoretical perspectives. He received his B.A. in Science of Earth Systems from Cornell

University in 2005, and Ph.D. in Meteorology and Physical Oceanography from the University of Miami in 2010. Dan was a postdoc at Penn State University from 2010-2012, and an NSF Postdoctoral Fellow at NCAR from 2013-2015. Currently, Dan is a UCAR Visiting Scientist at the Naval Research Laboratory.

#### **EDITOR'S AWARD**

Journal of the Atmospheric Sciences

#### YUAN WANG

Research Scientist, California Institute of Technology, Pasadena, California.



For multiple timely, penetrating, and constructive reviews on subjects ranging from cloud physics and aerosols to climate

Dr. Wang is a research scientist at California Institute of Technology. His research interests include aerosolcloud-precipitation interactions and their climate impacts,

aerosol properties and haze formation, cloud microphysics and dynamics, anthropogenic forcing on atmosphere, ocean and cryosphere. Dr. Wang mainly uses multiscale weather and climate models in combination with spaceborne and in-situ measurements to address those scientific questions.

Weather, Climate, and Society

#### TODDI A. STEELMAN

Executive Director and Professor, School of Environment and Sustainability, University of Saskatchewan, Saskatoon, Canada.



For rigorous and thoughtful reviews that have maintained the high quality of the journal

Dr. Toddi A. Steelman is Executive Director and Professor, School of Environment and Sustainability, University of Saskatchewan, Saskatoon, Canada. Her broad research agenda focuses on improving the governance of

environmental and natural resources, emphasizing the role of the public and community in science, policy, and decisionmaking interactions.

#### **EDITOR'S AWARD**

**Earth Interactions** 

#### GREGORY BRIAN GOODRICH

Associate Professor, Department of Geography and Geology, Western Kentucky University, Bowling Green, Kentucky.



For insightful reviews of papers focused on hydroclimatology, teleconnections, and applications of statistical methods

Dr. Greg Goodrich joined the faculty at WKU in 2005 after completing his Ph.D. from Arizona State University. His research focuses on how multidecadal climate teleconnections

such as the Pacific Decadal Oscillation (PDO) and the Atlantic Multidecadal Oscillation (AMO) influence precipitation patterns associated with interannual teleconnections such as the El Niño Southern Oscillation (ENSO) and the North Atlantic Oscillation (NAO). He has served as the WKU Meteorology program leader since 2008.

# **EDITOR'S AWARD**Glossary of Meteorology

#### BRENT L. SHAW

VP, Commercial Weather, Iteris, Inc., Norman, Oklahoma.



For numerous timely and complete reviews in collaboration with members of the Weather Analysis and Forecasting Committee

Brent Shaw is a Certified Consulting Meteorologist and VP for Commercial Weather at Iteris, Inc. He holds B.S. and M.S. degrees in Atmospheric Science from the University

of Kansas and Colorado State University, respectively. He has been involved in applied meteorological research and development for over 20 years, spanning military, civilian, and commercial sectors. A native of Kansas City, he and his wife Ashley make their home in Norman, Oklahoma, and have three children.

# THE MAX A. EATON STUDENT PRIZE

#### KUNIAKI INOUE

Postdoctoral Researcher, NOAA/Geophysical Fluid Dynamics Laboratory, Princeton, New Jersey.



For his paper, "Gross Moist Stability assessment: Convective Amplification and Decay"

Kuniaki Inoue is currently a postdoctoral researcher at NOAA/GFDL in Princeton, NJ. He obtained his Ph.D. in Atmospheric Science from the University of Wisconsin-Madison in 2016. His research

interests include the dynamics of tropical waves and the MJO, and coupling between moist convection and large-scale circulations. Before attending the graduate school, he received his B.S. and graduated with distinction in 2010 in Forest Science from the University of Wisconsin-Madison.

# 97<sup>th</sup> Annual Awards banquet

# Wednesday, 25 January 2017



# THE ROBERT E. HORTON LECTURER IN HYDROLOGY FOR 2017

#### HOSHIN V GUPTA

Professor, Department of Hydrology and Atmospheric Sciences, The University of Arizona, Tucson, Arizona.



For research into calibration and optimization of hydrological models, and for fundamental contributions towards quantifying uncertainty in hydrologic model predictions

Hoshin Gupta is a hydrologist, systems theorist, philosopher, and leader in Systems Methods for Reconciling Models with Data. Historically he has driven

improvements to model-based learning, including multi-criteria and diagnostic methods, and is now leading developments in assessment and correction of model structural adequacy based in Bayesian and Information Theoretic approaches. Hoshin is a Fellow of the AGU and the 2014 Dalton Medalist of the EGU Union, and recent Editor of *Water Resources Research*.

# THE BERNHARD HAURWITZ MEMORIAL LECTURER FOR 2017

#### WAYNE H. SCHUBERT

Professor Emeritus, Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado.



For profound insights into the role of cloud processes in the dynamics of large-scale circulations

Wayne Schubert joined the CSU Atmospheric Science Faculty in 1973 after completing his Ph.D. at UCLA. He has taught classes in atmospheric dynamics and tropical meteorology. His

research areas have included the parameterization of deep convection, the marine boundary layer, simplified models of balanced flows, and the dynamics of tropical cyclones. He has had the great pleasure of working with an outstanding group of approximately 30 research colleagues and graduate students over the last several decades.

# THE WALTER ORR ROBERTS LECTURER IN INTERDISCIPLINARY SCIENCES FOR 2017

#### CYNTHIA ROSENZWEIG

Senior Research Scientist, NASA Goddard Institute for Space Studies, New York, New York.



For innovative efforts in turning climate knowledge into action in support of environmentally-based decision making in agriculture, urban systems, and assessment

Dr. Cynthia Rosenzweig is a Senior Research Scientist at NASA Goddard Institute for Space Studies in New York City. Dr. Rosenzweig is

Co-Director of the Urban Climate Change Research Network (UCCRN). She is Co-Editor of UCCRN's recently released Second Assessment Report on Climate Change and Cities (ARC3.2), the first-ever global, interdisciplinary, cross-regional, science-based assessment to address climate risks, adaptation, mitigation, resilience, and transformation relevant to cities.

#### SPECIAL AWARD

# EARTH SCIENCE Women's Network



For inspirational commitment to broadening the participation of women in the Earth sciences, providing a supportive environment for peer mentoring and professional development

ESWN is an international peer-mentoring network with over 3000 women in the Earth Sciences, most of whom are in the early stages of their careers. The ESWN mission is to promote career development, build community, provide opportunities for informal mentoring and support and facilitate professional collaborations. Having more women in science improves research outcomes and makes our economy stronger, while opening doors of opportunity and equity for women around the world. More information at eswnonline.org.

# THE AWARD FOR OUTSTANDING SERVICES TO METEOROLOGY BY A CORPORATION

#### CLIMADATA CORPORATION

Miami, Florida

services to Spanish-speaking people in the U.S. and abroad



For pioneering work, sustained over 25 years, providing weather forecasts, warnings, and specialized meteorological

ClimaData is a small firm whose legacy is providing potentially life-saving weather alerts and forecasts to over 60 Spanish-language media outlets in the U.S. and Caribbean. Over the years, ClimaData has garnered a wide spectrum of other clients, including heads of state, multinational pharmaceuticals, litigators, and many weather-sensitive industries. Today ClimaData is also helping organizations like the National Environmental Education Fund (NEEF) and Climate Central reach a wider audience by translating educational material into Spanish.

# THE AWARD FOR BROADCAST METEOROLOGY

ALEX V. GARCIA, CBM Chief Meteorologist, KABB TV, San Antonio, Texas.



For devotion to the safety, welfare, and education of the citizens of South Central Texas, and 30 years of valuable contributions to the scientific community

Alex Garcia is the Chief Meteorologist for Fox News at Nine in San Antonio, Texas. Alex has received the AMS CBM Seal of Approval,

eight Associated Press Awards for Best Weathercast and is the FLASH 2016 National Weatherperson of the Year. He is the founder of the National Tropical Weather Conference and StormCenter LIVE: Severe Weather Conference for broadcast meteorologists. He produces a series of science education programs through his non-profit organization, the Urban Science Initiative Inc.

# THE HENRY T. HARRISON AWARD FOR OUTSTANDING CONTRIBUTIONS BY A CONSULTING METEOROLOGIST

#### BRUCE A. EGAN. CCM

President, Egan Environmental Inc., Beverly, Massachusetts.



For an exceptional career that laid the foundation for many regulatory dispersion models, and for mentoring young professionals

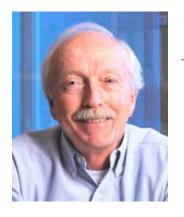
Dr. Egan is a Fellow of the AMS and provides expertise in air pollution meteorology and dispersion model development and applications to both public and private sector clients. Prior

to founding EEI, he managed consulting groups at URS and at ENSR/ERT. He studied Engineering and Applied Physics and Environmental Health Sciences at Harvard, and Meteorology at MIT. He has served on or chaired several AMS committees, workshops and conferences.

#### THE HELMUT E. LANDSBERG AWARD

#### WALTER F. DABBERDT

Corporate Science Advisor, Vaisala Group, Louisville, Colorado.



For decades of leadership in urban meteorology, including fundamental contributions to street-canyon modeling, monitoring networks, and evaluating severe weather impacts on cities

Walter Dabberdt has been with Vaisala since 2000, following extended stays at NCAR and Stanford Research Institute. He

received the B.S. from SUNY Maritime College and M.S. and Ph.D. from University of Wisconsin-Madison. His professional interests include urban, PBL and mesoscale meteorology; dispersion; observing systems; air quality; and fluid modeling. Dabberdt is an AMS Past President, and has served on numerous scientific, technical and advisory bodies in the U.S., Canada, China, Finland and at WMO.

# THE AWARD FOR OUTSTANDING ACHIEVEMENT IN BIOMETEOROLOGY

#### MARC AUBINET

Professor, University of Liege, Gembloux Agro Bio Tech, Liege, Belgium.



For significant contributions, in research and education, to applying the eddy-covariance method to atmosphere-biosphere interactions and to the problem of advection

Marc Aubinet focused his researches on gas exchanges between ecosystems and atmosphere. He developed and managed for more than 20

years eddy covariance sites in Belgium on forests, grasslands and crops and studied their carbon balance and their methane and N2O emissions. Professor of environmental physics at Gembloux Agro-Bio Tech (University of Liege), he is especially concerned with education and, through his papers and book, contributed significantly to the popularization of the eddy covariance methodology.

#### THE NICHOLAS P. FOFONOFF AWARD

### J. THOMAS FARRAR

Associate Scientist, Department of Physical Oceanography, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts.



For insightful analysis of observations yielding a deeper understanding of tropical and upper ocean dynamics, and for generous collaboration and leadership in major field experiments

J. Thomas Farrar is an Associate Scientist in the Department of Physical Oceanography at the Woods

Hole Oceanographic Institution. He obtained his Ph.D. in physical oceanography from the Massachusetts Institute of Technology and the Woods Hole Oceanographic Institution in 2007. His research interests concern the dynamics of the tropical oceans and air-sea interaction on scales ranging from meters to global.

#### THE HENRY G. HOUGHTON AWARD

### JENNIFER E. KAY

Assistant Professor, Department of Atmospheric and Oceanic Sciences, University of Colorado at Boulder, Boulder, Colorado.



For the innovative use of observations and global climate models to better understand the rapidly evolving climate of the polar regions

Jen Kay is an assistant professor of Atmospheric and Oceanic Sciences and Fellow of CIRES at the University of Colorado at Boulder. She is also a visiting scientist at NCAR,

where she worked as a scientist prior to joining CU-Boulder. Dr. Kay researches polar climate change, feedbacks, and variability, with a specific focus on connecting global coupled climate modeling with observed cloud, precipitation, and sea ice processes.

#### THE CLARENCE LEROY MEISINGER AWARD

#### PIERRE GENTINE

Associate Professor, Earth Institute, Department of Earth and Environmental Engineering, Columbia University, New York, New York.



For fundamental and diverse contributions to the understanding of land-atmosphere interactions, atmospheric convection, and ecohydrology

Pierre Gentine is an associate professor in Earth and Environmental Engineering at Columbia University and at the Earth Institute. His work

focuses on land-atmosphere interactions, the boundary layer and convection, as well as, vegetation regulation of the continental hydrologic cycle, using a combination of theory, modeling, and remote sensing observations. He is a recipient of the NASA, DOE and NSF early career awards.

#### THE JOANNE SIMPSON MENTORSHIP AWARD

#### M. SUSAN LOZIER

Ronie-Richele Garcia Johnson Professor of Ocean Sciences, Duke University, Durham, North Carolina.



For leadership in establishing a nationwide mentoring program for early-career female physical oceanographers and serving as a mentoring role model for the community

Susan Lozier has been a member of the Duke faculty since 1992, where she is now a distinguished professor. She was named an American

Meteorological Society Fellow in 2008, a Fellow of the American Geophysical Union in 2014, and a Fellow of the American Association for the Advancement of Science in 2015. She serves as the President of The Oceanography Society and is the international lead for the Overturning in the Subpolar North Atlantic Program.

#### THE KENNETH C. SPENGLER AWARD

### **JON DAVIS**

Meteorology Team Lead, Riskpulse, Chicago, Illinois.



For extraordinary vision to advance the role of meteorology in the new energy economy and outstanding leadership of the AMS Energy Committee and its conference

Jon leads Riskpulse's forecasting operations and consulting services for global energy and agricultural markets as well as supply chain

logistics. He is widely considered one of the foremost experts on the impact of weather and climate on global commodities. He graduated from the University of Wisconsin-Madison in 1985. His career path included 18 years in the commodity divisions within Citigroup, 10 years at Chesapeake Energy, and the past 3 years at Earthrisk/Riskpulse.

# THE CLEVELAND ABBE AWARD FOR DISTINGUISHED SERVICE TO ATMOSPHERIC SCIENCES BY AN INDIVIDUAL

#### LOUIS W. UCCELLINI

Director, National Weather Service, Silver Spring, Maryland.



For dynamic, forward-looking leadership in a distinguished career dedicated to advancing operational meteorology to make the nation weather-ready

Dr. Louis W. Uccellini, as Director of the National Weather Service, is responsible for the civilian weather operations for the United States, its territories, adjacent

waters, and ocean areas. Previously, he served as Director of the National Centers for Environmental Prediction and section head for the Mesoscale Analysis and Modeling Section at Goddard Space Flight Center's Laboratory for Atmospheres. He is co-author of the AMS monograph Northeast Snowstorms. He received his Ph.D. in meteorology from the University of Wisconsin-Madison

# THE EDWARD N. LORENZ TEACHING EXCELLENCE AWARD

#### MARK W. WYSOCKI

Senior Lecturer, Cornell University, Ithaca, New York.



For unwavering dedication to inspiring generations of students in the classroom, and for compassionate involvement in the daily lives of his advisees

Mark Wysocki joined the Cornell faculty as an instructor in Meteorology in 1988. He is now a Senior Lecturer responsible for classroom instruction for science

majors and non-science majors. He serves as the Director of Undergraduate Studies in Atmospheric Science and is the State Climatologist for New York State. His main interest lies in teaching with research interests in the areas of air pollution, forecasting and weather analysis.

# THE CHARLES FRANKLIN BROOKS AWARD

### J. MARSHALL SHEPHERD

Director, Atmospheric Sciences Program, University of Georgia, Athens, Georgia.



For visionary leadership as president and serving as an outstanding ambassador for the Society through outreach in popular and social media

Dr. J. Marshall Shepherd, a leading international expert on weather and climate, served as the 2013 President of American Meteorological Society (AMS), Dr. Shepherd is Director of the

University of Georgia's Atmospheric Sciences Program and is the Georgia Athletic Association Distinguished Professor. Dr. Shepherd hosts The Weather Channel's Award-Winning Sunday talk show Weather Geeks and is a contributor to Forbes Magazine.

#### THE HYDROLOGIC SCIENCES MEDAL

#### EFI FOUFOULA-GEORGIOU

Distinguished Professor, Department of Civil and Environmental Engineering, University of California, Irvine, Irvine, California.



For pioneering contributions to the science of hydrometeorology and for visionary and sustained leadership in advancing interdisciplinary hydrologic research

Efi Foufoula-Georgiou is a Distinguished Professor in the Department of Civil and Environmental Engineering at the University of California,

Irvine. Her research focuses on hydrology and geomorphology, with special interest on space-time modeling of precipitation and landforms. She is the recipient of the John Dalton Medal of EGU, the Hydrological Sciences Award of AGU, the Robert Horton Lecture of AMS, and Fellow of AGU and AMS. She is the President of the Hydrology section of AGU.

#### THE HENRY STOMMEL RESEARCH AWARD

#### LYNNE D. TALLEY

Distinguished Professor of Physical Oceanography, Scripps Institution of Oceanography, University of California, San Diego, California.



For exceptional contributions to understanding the genesis, distribution, and fate of mode and intermediate waters, and their importance in global heat and freshwater transport

Lynne Talley is a Distinguished Professor of Physical Oceanography at Scripps Institution of Oceanography, University of California, San

Diego. Talley's research focuses on the general circulation of the ocean, depicting the movement of heat, salinity, and water masses. She received a B.A. in physics from Oberlin College, and a Ph.D. in physical oceanography from MIT–Woods Hole Oceanographic Institution. Prior to joining Scripps, Talley was a postdoctoral researcher at Oregon State University in Corvallis.

#### THE VERNER E. SUOMI AWARD

#### SERGEY SOKOLOVSKIY

Project Scientist, UCAR, Boulder, Colorado.



For exceptional theoretical and practical contributions to the science and application of radio occultation observations of Earth's atmosphere

Sergey Sokolovskiy is a project scientist at UCAR, working on the GNSS radio occultation remote sensing of the atmosphere from space since 1995. He has been involved in

GPS/MET, COSMIC and COSMIC-2 projects, by contributing to methodology, inversion algorithms and science applications of the GNSS RO. One of his main contributions is the model-aided open-loop RO tracking of RO signals. In 1997 and 2007 he received Science and Technology Advancement Awards from UCAR.

#### THE SVERDRUP GOLD MEDAL AWARD

#### **SHANG-PING XIE**

Roger Revelle Professor, Scripps Institution of Oceanography, University of California San Diego, La Jolla, California.



For fundamental contributions to understanding the coupled ocean-atmosphere feedback processes involved in climate variability and climate change

Shang-Ping Xie studies ocean-atmosphere interactions, climate variability and change. He received his bachelor's degree from Ocean University of China (1984) and doctorate

from Tohoku University (Japan, 1991), previously taught at Hokkaido University (Japan) and University of Hawaii. He has published about 300 research papers, was a lead author of the IPCC Fifth Assessment Report (2013), and served as a *Journal of Climate* editor (2006-2010). He is a Thompson-Reuters highly-cited researcher and AGU fellow.

#### THE JULE G. CHARNEY AWARD

### DAVID J. RAYMOND

Professor Emeritus of Physics, New Mexico Institute of Mining and Technology, Socorro, New Mexico.



For profound insights into the interaction between atmospheric convection and the larger-scale environment

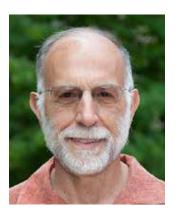
After receiving a Ph.D. in high energy physics from Stanford University, David Raymond switched to atmospheric physics, first at the University of Hawaii and then at New Mexico Tech. Interests in

geophysical fluid dynamics and atmospheric convection led to many theoretical studies and field programs in the tropics over the past 25 years. These studies helped uncover the subtle and fascinating relationships between convection and weather systems such as tropical cyclones and the Madden-Julian oscillation.

# THE CARL-GUSTAF ROSSBY RESEARCH MEDAL

#### RICHARD ROTUNNO

Senior Scientist, National Center for Atmospheric Research, Boulder, Colorado.



For elegant, rigorous work that has fundamentally increased our understanding of mesoscale and synoptic-scale dynamics, especially the role of vorticity in the atmosphere

Richard Rotunno is a Senior Scientist at the National Center for Atmospheric Research in Boulder, Colorado. He received a Ph.D. in 1976 in Geophysical

Fluid Dynamics from Princeton University. His research covers a wide range of topics in mesoscale meteorology. He is a two-time recipient of the AMS Banner I. Miller Award (1991 with K. Emanuel; 2010 with G. Bryan) and in 2004 he was the recipient of the AMS Jule G. Charney Award.

#### **HONORARY MEMBER**

#### SUSAN KATHRYN AVERY

President Emerita, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts.



Susan Avery most recently served as president and director of the Woods Hole Oceanographic Institution from 2008-2015. She holds a Doctorate in Atmospheric Science from the University of Illinois. From 1982-2008 she was on the faculty at the University of Colorado, Boulder where she also held various administrative

positions. Avery is a Fellow and former president of the American Meteorological Society, and a Fellow of the Institute of Electrical and Electronics Engineers and the American Association for the Advancement of Science.

#### **HONORARY MEMBER**

#### MARGARET A. LEMONE

Senior Scientist Emerita, National Center for Atmospheric Research, Boulder, Colorado.



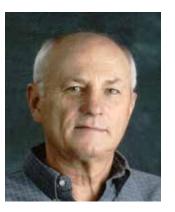
Margaret "Peggy" LeMone received her B.A. at the University of Missouri-Columbia (1967) and her doctorate at the University of Washington (1972). Her interests include the boundary layer and its interaction with clouds and the surface, convective-system structure and its impact, science education, and equal opportunity. An

AMS member since 1969, she has served in several capacities, including as founding Chair of the Board on Women and Minorities, as member of the Council, and as President.

#### **HONORARY MEMBER**

#### THOMAS H. VONDER HAAR

University Distinguished Professor of Atmospheric Science, Colorado State University, Fort Collins, Colorado.



Professor Thomas H. Vonder Haar (Ph.D., Wisconsin, 1968) has taught and advised students and led research at the Department of Atmospheric Science, Colorado State University since 1970. With students and colleagues he designs and uses satellite observations for new understanding of weather and climate. He is a Fellow of

AMS and AGU and former AMS Councilor and Committee Chair. For his scientific research and leadership he was awarded the AMS Charney award, elected to the National Academy of Engineering and named a University Distinguished Professor at CSU.

# 98<sup>th</sup> Annual Meeting

# See you in



AUSTIN, TEXAS 7–11 January 2018