

Pavlos Kollias

a. Professional Preparation

Institution	Major	Degree	Year
The University of Athens, Greece	Physics	B.S.	1994
The University of Athens, Greece	Env. Physics	M.Sc.	1996
University of Miami, FL	Meteorology	Ph.D.	2000

b. Appointments

2016 – present	Professor, <i>Stony Brook University, NY</i>
2016 – present	Atmospheric Scientist, Brookhaven National Laboratory
2016 – present	International Faculty, University of Cologne, Germany
2012 – 2016	Associate Professor and Canada Research Chair, <i>McGill University, Montreal Canada</i>
2007 - 2012	Assistant Professor and Canada Research Chair, <i>McGill University, Montreal Canada</i>
2005 - 2007	Associate Scientist, <i>Brookhaven National Laboratory, Upton NY</i>
2004 - 2005	Assistant Scientist, <i>University of Miami,</i>
2003 - 2004	Visiting Fellow Scientist, <i>University of Colorado, Boulder CO</i>
2002 - 2003	Assistant Scientist, <i>University of Miami, Miami FL</i>
2001 - 2002	Postdoctoral Associate, <i>University of Miami, Miami FL</i>

c. Activities and Associations

Member, DOE ARM User Executive Committee, 2015-present
Associate Editor, AGU Journal of Geophysical Research – Atmospheres, 2012-present
Leader, Radar Science Group, DOE Atmospheric Systems Research program 2012-present
Director, Center for Multiscale Applied Sensing, Brookhaven National Laboratory, 2017-present
Member, BNL/ECS Department Science Advisory Committee, 2017-present
Member, Mission Advisory Group, Phase C/D, ESA EarthCARE mission, 2012-2017
Adjunct Professor, McGill University, 2016-present
Adjunct Associate Professor, University of Miami, 2011-present
Associate Partner, Initial Training for atmospheric Remote Sensing (ITaRS), 2014-2016
Member, Science Board, DOE ARM program, 2013-2015
Associate Editor, AMS Journal of Atmospheric and Oceanic Technology, 2012-2015
Chair, AMS Committee on Radar Meteorology, 2010-2012
Leader, Vertical Velocity for Climate Modelers Group, DOE/ARM program, 2008-2012
Associate Chief Scientist, DOE Atmospheric Radiation Measurement program, 2007-2009
Member, Executive Committee, National Science Foundation Engineering Research Center on the Collaborative Adapting Sensing of the Atmosphere (CASA), 2008-2012
Adjunct Assistant Professor, University of Miami, 2005-2011
Member, Program Committee, 32nd, 34th, 35th, 37th, AMS Radar Meteorology Conference
Member, Program Committee, 6th, 7th, EU Conf. on Radar in Meteor. & Hydro, 2010-12
Program Chair, AMS Symposium on Urban High Impact Weather, Jan. 2009, Phoenix, AR
Member, AMS Committee on Radar Meteorology, 2007-2010
Member, Science Team, DOE Atmospheric Radiation Measurement program, 2004-2011
Member, Science Team, ESA EarthCARE program, 2008-present
Member, American Meteorological Society, 2005-present
Member, American Geophysical Union, 2005-present

d. Awards

2015: NASA Group Achievement Award “For exceeding all expectations for GPM operations, data processing, algorithm performance, science impact, and education and public outreach within one year after launch”

2013-2014: Humboldt Research Fellowship for experienced researchers, Germany

2012-2017: Canada Research Chair in Radar Applications in Weather and Climate

<http://www.chairs-chaires.gc.ca/chairholders-titulaires/profile-eng.aspx?profileID=2210>

2007-2012: Canada Research Chair in Radar Applications in Weather and Climate

2003-2004: Visiting Scientist Fellowship, Cooperative Institute for Research in Environmental Sciences, University of Colorado

2003: NASA Group Achievement Award “for the Cirrus Regional Study of Tropical Anvils and Cirrus Layers – Florida Area Cirrus Experiment (CRYSTAL-FACE)

e. Short Courses

Winter School: On the observation and modeling of high-latitude and Arctic clouds, Hyytiala, Finland, March 19-25, 2017. One-week school, role: guest lecturer on Cloud Radars.

37th AMS Conference on Radar Meteorology, Norman Oklahoma, 13 September 2015. One day short course, role: organizer: CM and MM- Wavelength Radar Applications

ARM Summer Training and Science Applications, National Weather Center, Norman Oklahoma, July 15-24, 2015: Ten days school, role: Chair

Summer School: Clouds and Precipitation: Observations and Processes, Julich Germany, 8-17 September, 2014: Ten days school, role: guest lecturer

Eighth European Conference on Radar in Meteorology and Hydrology, Garmisch Germany, 1-5 September 2014. One-day short-course, role: organizer: Research Applications of Radar Doppler Spectra

Summer School: Applications of weather and cloud radars, Hyytiala, Finland, 9-13 June 2014. One-week school, role: guest lecturer on Cloud Radars.

Summer School: Remote Sensing of Clouds and Precipitation, Bonn Germany, 15-19 July, 2013. One-week school, role: guest lecturer on Cloud Radars

Seventh European Conference on Radar in Meteorology and Hydrology, Toulouse, France, 24 July 2012: One day short-course, role: organizer: Millimeter Wavelength Radars

35th AMS Conference on Radar Meteorology, Pittsburgh Pennsylvania, 25 September 2011. One day short course, role: organizer: Millimeter Wavelength Radars.

Fifth European Conference on Radar in Meteorology and Hydrology, Helsinki, Finland 30 June - 4 July 2008, one-day short-course, role: Co-organizer: *Understanding the Physics of Winter Precipitation*

f. Invited Talks

American Geophysical Union, Fall meeting, Dec 11-15, 2017, San Francisco, CA. Invited presentation: New Cloud and Precipitation Research Avenues Enabled by low-cost Phased-array Radar Technology

University of Cologne, Institute for Geophysics and Meteorology, Summer Workshop on High-resolution Modeling & Visualization, 17 June 2017: How can measurements constrain models?

Pennsylvania State University, Department of Meteorology and Atmospheric Sciences, April 12, 2017, Colloquia seminar series: Early detection of drizzle particle growth in warm clouds using radars.

City College of New York, Environmental Science Seminars, March 31, 2017: Early detection of drizzle particle growth in warm clouds using radars.

Max-Planck Institute for Meteorology at Hamburg, Germany, June 18, 2014, Klimacampus Seminars, title: "The rise of cloud research from the ground up – The new ARM radar facilities"

Leipzig University, Institute for Meteorology, Leipzig, Germany, December 10, 2013, title: "Cloud Studies Using Millimeter Wavelength Radars"

Ludwig-Maximilians University of Munich, Meteorological Institute, Munich Germany, November 27, 2013, title: "Cloud Studies Using Millimeter Wavelength Radars"

University of Bonn, Meteorological Institute, Summer School on Remote Sensing of Clouds and Precipitation, July 15-19, 2013, title: "Capability of Cloud Radars"

4th International Workshop on Snowfall Measurement from Space (IWSSM-4) 24 - 26 April 2013, Mammoth Mountain, California, title: "Radar-based retrievals of ice and snow"

Brookhaven National Laboratory, Atmospheric Science Department Seminar Series, Jan 15, 2013. Invited seminar title: "Cloud Research Using the DOE ARM Climate Research Facility: Opportunities and Challenges"

American Geophysical Union, Fall meeting, Dec 3-7, 2012, San Francisco, CA. Invited presentation: Searching for Microphysical Information in Radar Observations.

International School for Atmospheric Radars at National Central University, Chung-Li City, Taiwan, November 12-17, 2012, title: "Research Applications of Cloud Radars"

Reading University, Department of Meteorology, Reading UK, April 17, 2012, title: "Observations of marine stratocumulus clouds at the Azores during the ARM Mobile Facility deployment"

NASA Goddard Institute for Space Studies, New York, NY, USA, February 24, 2012, title: "New DOE Atmospheric Radiation Measurement Program Radar Capabilities: Opportunities and Challenges"

35th AMS Radar Meteorology Conference, Pittsburg, PA, September 26, 2011, keynote presentation, title: "A network of X-band radars for cloud research".

Radiation and Climate Gordon Research Conference, Waterville Maine, July 12, 2011, invited talk, title: "A fresh look of clouds using radars".

Dalhousie University, Department of Physics and Atmospheric Science, Halifax Nova Scotia, March 11, 2011, invited seminar, title: "Cloud and Precipitation Studies using Millimeter-Wavelength radars"

Workshop on Innovative Satellite Observations to Characterize the Cloudy Boundary Layer (invitation only) Keck Institute for Space Studies, Caltech, September 21-24, 2010, invited talk, title: Advancing cloud and precipitation observations from space - A radar perspective

EarthCARE Joint Mission Advisory Group Meeting (JMAG) – Japanese Aerospace Exploration Agency (JAXA), Tsukuba Space Center, Japan 10-11 June 2010. Invited talk, title: Simulations of EarthCARE CPR Doppler measurements and impact on retrievals

8th NASA/GPM International Planning Workshop - CNES / CNRS, Paris, France, 16-18 June 2009. Invited talk title: ARM/GPM: Present and Future joint activities

4TH Pan- GEWEX Cloud System Studies (GCSS) Meeting, Toulouse France, 2-6 June 2008. Keynote presentation, title: *ARM's Future Observations and Products*

Brookhaven National Laboratory, Atmospheric Science Department Seminar Series, June 15, 2007. Invited seminar title: *Radar Applications to Climate Research*

Panel Member: Beyond CloudSat - Future missions and validation studies, 4th Workshop of the Canadian CloudSat/CALIPSO Validation Project, November 27-28, 2007, Canadian Space Agency Headquarters, St. Hubert, Quebec

Sixteenth Atmospheric Radiation Measurement (ARM) Science Team Meeting, March 2006 Albuquerque, New Mexico. Keynote talk: Cloud Resolving Model Radar Applications

32nd AMS Conference in Radar Meteorology, October 2006, Albuquerque, New Mexico, keynote talk: Recent Advances in the Use of Millimeter-Wavelength Radars for Atmospheric Research
Pennsylvania State University, Department of Meteorology Seminar Series, Fall, 2000. Invited seminar title: Why Mie? Measurements of vertical air motion and raindrop size distributions in convective clouds
University of Wyoming, Department of Atmospheric Science, Spring 2003. Invited seminar title: Why Mie? Measurements of vertical air motion and raindrop size distributions in convective clouds

g. Field Experiments

Drizzle and Entrainment Cloud Study (**DECS**), Monterey, CA (1999)
US/DOE ARM Cloud Intensive Observations Period, (**IOP**) Lamont, OK (2000)
Improvement of Microphysical PaRameterization through Observational Verification Experiment (**IMPROVE-II**), Cascade Mountains, OR (2002)
The Cirrus Regional Study of Tropical Anvils and Cirrus Layers – Florida Area Cirrus Experiment (**CRYSTAL-FACE**), Miami, FL, (2002)
Coastal Stratocumulus Imposed Perturbation Experiment (**CSTRIPE**), Monterey, CA (2003)
Pan American Climate Studies (**PACS**) Stratus, ship-based, Southeast Pacific (2003)
New England Air Quality Study (**NEAQS**), ship-based, Gulf of Maine (2004)
Rain In Cumulus over Ocean (**RICO**), ship-based field experiment, Caribbean (2005)
MArine Stratus Radiation, Aerosol, and Drizzle (**MASRAD**), Pt. Reyes, CA (2005)
Drizzle, Entrainment and Chaff Studies (**DECS**), Monterey, CA (2006)
Cloud and Land Surface Interaction Campaign (**CLASIC**), Lamont, OK (2007)
Clouds and Precipitation Study (**CPS**), Miami, FL (2009)
Midlatitude Continental Convective Clouds Experiment (**MC³E**), Lamont OK, 2011
South Florida Aerosol Cloud Rain Study – **SFACRS**, Key West, FL, 2012
The NASA/GPM and EC Cold Season Precipitation Experiment (**GCPEX**), Ontario, 2012
The Aerosols and Clouds Experiments, Eastern North Atlantic (**ACE-ENA**), Azores, 2017