May 30 - June 2, 2017
Colorado State University
Fort Collins, CO USA

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Christopher R. Williams, NOAA/CIRES, USA
07:30  On-site Registration/Check-in

08:15  Opening Announcement

Session A: Aerosols, Clouds and Precipitation

08:30  Cloud radar spectral polarimetry for quantitative precipitation estimation
Alexander Myagkov; Thomas Rose
Radiometer Physics GmbH, GERMANY

09:00  High Spectral Resolution Lidar extinction profiles--an error analysis
Edwin Eloranta
University of Wisconsin, UNITED STATES

09:15  The Cyprus Clouds Aerosols and Rain Experiment (CyCARE)
Martin Radenz¹; Johannes Bühl²,³; Rodanthi Mamouri²; Patric Seifert²; Argyro Nisantzi²; Ronny Engelmann²; Albert Ansmann²
¹Institute for Tropospheric Research (TROPOS), GERMANY
²Leibniz Institute for Tropospheric Research, GERMANY
³TEPAK, Cyprus University of Technology, CYPRUS

09:30  Multi-Sensor Observations of Polar Ice Clouds and Horizontally Oriented Ice Crystals
Robert A. Stillwell¹; Ryan R. Neely¹; Jeffrey P.Thayer¹
¹Aerospace Engineering Sciences, University of Colorado at Boulder, UNITED STATES
²School of Earth and Environment, University of Leeds, ENGLAND

09:45  Investigation of Vertical Structure of Precipitation Observed by Spaceborne and Ground-based Radar in Different Regimes
Haiming Tan; V. Chandrasekar; Haonan Chen
Colorado State University, UNITED STATES

10:00  Coffee Break

10:30  Cloud observations at the Arctic atmospheric observatory AWIPEV: results from a novel 94-GHz FM-CW cloud radar
Bernhard Pospichal²; María Barrera Verdejo; Kerstin Ebell; Tatiana Nomokonova; Rosa Gierens; Ulrich Löhntert; Ewan O’Connor; Nils Küchler, Christoph Ritter; Marion Maturilli; Roland Neuber
¹University of Cologne, GERMANY
²Forschungszentrum Juelich, GERMANY
11:00  Characterization and Classification of Vertical Hydrometeor Profiles Observed by Ku-band Dual-Polarization Radar
Haonan Chen; V. Chandrasekar
Colorado State University, UNITED STATES

11:15  Rainfall profiles of x-band polarimetric Doppler weather radar from southern China monsoon field campaign
Zhao Shi¹, ²; V.Chandrasekar¹; Jinxin He²
¹Colorado State University, UNITED STATES
²Chengdu University of Information Technology, CHINA

11:30  Analysis of a case of sulfate aerosols over Austria
Camelia Talianu¹, ²; Petra Seibert¹
¹Institute of Meteorology, University of Natural Resources and Life Sciences, AUSTRIA
²National Institute or R&D for Optoelectronics, ROMANIA

11:45  Research on atmospheric profiles combined ground-based and satellite-based radiometers
He Jieying
Key Laboratory of Microwave Remote Sensing, National Space Science Center, Chinese Academy of Sciences, CHINA

12:00  Lunch

Session B: Aerosols, Clouds and Precipitation/Algorithms For Improved Parameter Retrievals

13:30  Investigating the effect of Saharan dust long-range transport on cloud properties and evolution in the tropical north Atlantic trade wind region properties and evolution in the tropical north Atlantic trade wind region
S. Groß¹; M. Wirth¹; M. Gutleben¹; F. Ewald¹; T. Kölling²; T. Zinner²; B. Mayer²
¹German Aerospace Center (DLR), Institute of Atmospheric Physics, GERMANY
²Ludwig-Maximilians-Universität München, Meteorological Institute, GERMANY

14:00  A new criterion to improve drizzle detection from ground based instrumentation
Claudia Acquistapace; Ulrich Löhner; Pavlos Kollias; Ewan O’Connor; Stefan Kneifel; Max Maahn
University of Cologne, GERMANY

14:15  Lidar observations of dark band in clear-air conditions
Paolo Di Girolamo¹; Andrea Scoccione²; Marco Cacciani¹; Donato Summa¹; Jan H. Schween³
¹Scuola di Ingegneria, Università degli Studi della Basilicata, ITALY
²Dipartimento di Fisica, Università di Roma “La Sapienza”, ITALY
³Institut fuer Geophysik und Meteorologie, Universität zu Köln, GERMANY
14:30  Detection of weak echo of light snowstorm based on spectral-based processing in weather radar
V. Chandrasekar¹; Xuehua Li²
¹Colorado State University (CSU), UNITED STATES
²Chengdu University of Information Technology (CUIT), CHINA

14:45  Raman lidar profiling for radiative forcing estimates
Heike Kalesse¹; Iwona S. Stachlewksa²; Krzysztof M. Markowicz²; Lucja Janicka²; Justyna Lisok²
¹Leibniz Institute for Tropospheric Research, GERMANY
²University of Warsaw, Faculty of Physics, Institute of Geophysics, POLAND

15:00  Coffee Break

15:30  Variational Retrieval of Boundary Layer Thermodynamic Profiles from Ground-based Observations
David D. Turner
NOAA Earth System Research Laboratory, Global Systems Division, UNITED STATES

16:00  Observation of in-cloud vertical air motion with a combination of Doppler lidar, cloud radar and radar wind profiler
Martin Radenz¹; Johannes Bühl¹; Volker Lehmann²
¹Institute for Tropospheric Research (TROPOS), GERMANY
²Deutscher Wetterdienst, Meteorologisches Observatorium Lindenberg (MOL), GERMANY

16:15  Combined wind and aerosol/cloud measurements with coherent Doppler LIDARs
P. Drewniak; P. Royer; L. Thobois
LEOSPHERE, FRANCE

16:30  Determination of Planetary Boundary Layer Heights from Doppler Wind Lidar Measurements
Benjamin Tucker¹; Brian Carroll¹; Thomas Rieutord²; Alan Brewer³; Aditya Choukulkar⁴; Timothy Bonin⁴; Belay Demoz²; Ruben Delgado¹
¹University of Maryland, Baltimore County, UNITED STATES
²Météo, FRANCE
³NOAA Earth System Research Laboratory, UNITED STATES
⁴Cooperative Institute for Research in Environmental Sciences, UNITED STATES

17:00  Method to identify and remove clutter in vertically pointing radar Doppler velocity spectra before estimating boundary layer cloud properties
¹Christopher R. Williams; ²Joseph C. Hardin
¹Cooperative Institute for Research in Environmental Science (CIRES), University of Colorado Boulder, UNITED STATES
²Pacific Northwest National laboratory (PNNL), UNITED STATES
08:25  Opening Announcement

**Session C: Boundary Layer and Mesoscale Studies/Measurement Networks, Aircraft and Satellite Platforms**

08:30  **Comparisons of boundary layer heights in the Columbia River gorge and basin from wind profiling radars and numerical weather prediction models**
Laura Bianco¹; Irina Djalalova¹; James M. Wilczak²; Katherine McCaffrey¹; Joe Olson¹; Jaymes Kenyon¹; Kathy Lantz¹; Chuck Long¹
¹University of Colorado and Cooperative Institute for Research in Environmental Sciences (CIRES), UNITED STATES
²U.S. National Oceanographic and Atmospheric Administration (NOAA), UNITED STATES

09:00  **The Land-Atmosphere Feedback Experiment: Theory and Design**
R. Michael Hardesty¹; David D. Turner²; Volker Wulfmeyer
¹Cooperative Institute for Research in Environmental Studies (CIRES), University of Colorado, UNITED STATES
²NOAA Earth System Research Laboratory, Global Systems Division, UNITED STATES
³University of Hohenheim, GERMANY

09:15  **Observational and modeling benefits of ground-based thermodynamic profiling during severe weather events**
Timothy J. Wagner¹; William E. Lewis¹; Jason. A. Otkin¹; W. Gregory Blumberg²; Kenneth; Cook³
¹Cooperative Institute for Meteorological Satellite Studies, Space Science and Engineering Center, University of Wisconsin – Madison, UNITED STATES
²Cooperative Institute for Mesoscale Meteorological Studies, University of Oklahoma, UNITED STATES
³National Weather Service Weather Forecast Office Wichita, UNITED STATES

09:30  **The Diurnal and Annual Variability of Mixing Layer Heights Measured by Doppler Lidar in Oregon and Indiana**
T. Bonin; M. Hardesty; A. Brewer; S. Sandberg; A. Weickmann; A. Choukulkar; Y. Pichugina; R. Banta
Cooperative Institute for Research in Environmental Studies (CIRES), University of Colorado, UNITED STATES
National Oceanic and Atmospheric Administration, Chemical Sciences Division, UNITED STATES
09:45  The unique Mauna Loa Observatory, Hawaii Boundary Layer
John E. Barnes\textsuperscript{1,2}; Nimmi C.P. Sharma\textsuperscript{3}
\textsuperscript{1}Cooperative Institute for Research in Environmental Sciences (Cires), University of Colorado, United States
\textsuperscript{2}Noaa Earth System Research Laboratory, Global Monitoring Division (GMD), United States
\textsuperscript{3}Department of Physics and Engineering Physics, Central Connecticut State University, United States

10:00 Coffee Break

10:30  Evaluation of boundary layer type in ICON using a new boundary layer classification developed at JOYCE
Claudia Acquistapace; Ulrich Löhnert; Jan Schween; Vera Schemann; Tobias Marke; Kerstin Ebell; Ewan O'Connor; Antti Manninen
University of Cologne, Germany

11:00  Characteristics Of Boundary Layer Jet Over South China Sea During The Early Summer Rainy Season Of Taiwan
Chuan-Chi Tu; Yi-Leng Chen; Pay-Liam Lin
Department of Atmospheric Sciences, National Central University, Taiwan

11:15  Development of European networks of ceilometers, Doppler lidars and Microwave Radiometers delivering real-time quality controlled data to national weather services
Dominique Ruffieux
Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland
TOPROF Cost Action ES1303, European Union

11:45  Capabilities and Benefits of Coherent Doppler LIDARs for Future Weather Observing Networks
P. Drewniak; L. Thobois; P. Royer, R. Parmentier
LEOSPHERE, France

12:00 Lunch

Session D: Measurement Networks, Aircraft and Satellite Platforms/Evaluation of Models and Data Assimilation
13:30  Optical Autocovariance Wind Lidar (OAWL): Performance Validation and Comparison with Alternative Techniques for Space-based Global Wind Profiling
R. Michael Hardesty¹; Sara C. Tucker²; Sunil Baidar¹
¹Cooperative Institute for Research in Environmental Sciences (CIRES), University of Colorado/NOAA, UNITED STATES
²Ball Aerospace, UNITED STATES

14:00  Profiling of atmospheric thermodynamic variables with a spaceborne RAMAN LIDAR
Paolo Di Girolamo¹; Andreas Behrendt², Volker Wulfmeyer²
¹Scuola di Ingegneria, Università degli Studi della Basilicata, ITALY
²Institut für Physik und Meteorologie, Universität Hohenheim, GERMANY

14:15  Routine measurements of atmospheric thermodynamic variables by RAMAN LIDAR in the frame of the international network for the detection of atmospheric composition change - NDACC
Benedetto De Rosa; Paolo Di Girolamo; Donato Summa; Dario Stelitano
Scuola di Ingegneria, Università degli Studi della Basilicata, ITALY

14:30  PollyNET - a network of automated Raman-polarization lidars: Towards additional long-term observations in the dust belt
Patric Seifert¹; Holger Baars¹; Dietrich Althausen¹; Ronny Engelmann¹; Birgit Heese¹; Albert Ansmann¹; Ulla Wandinger¹; Julian Hofer¹; Annett Skupin¹; Heike Kalesse¹; Martin Radenz¹; Johannes Bühler¹; Mika Komppula²; Eleni Giannakaki²; Maria Filioglou²; Daniele Bortoli³; Ana Maria Silva³; Sergio Pereira³; Iwona S. Stachlewska⁴; Wojciech Kumala⁴; Dominika Szczepaniak⁴; Vassilis Amiridis⁵; Eleni Marinou⁵,⁷; Michael Kottas⁵; Ina Mattis⁶; Gerhard Müller⁶
¹Leibniz Institute for Tropospheric Research (TROPOS), GERMANY
²Finnish Meteorological Institute, FINLAND
³Évora University, Institute for Earth Sciences, PORTUGAL
⁴University of Warsaw, Faculty of Physics, Institute of Geophysics, POLAND
⁵National Observatory of Athens (IAASARS), GREECE
⁶Deutscher Wetterdienst, Observatorium Hohenpeißenberg, GERMANY
⁷Aristotle University of Thessaloniki (Department of Physics), GREECE

14:45  Embedded In-situ Real-time Compression Decompression Framework for Atmospheric Big Data Applications
Tahmid Abtahi; Tinoosh Mohsenin; Belay Demoz; Ruben Delgado
University of Maryland Baltimore County, UNITED STATES

15:00  Coffee Break
15:30 Assimilating Doppler Wind Lidar in a High-Resolution Atmospheric Model for Boundary-Layer Modeling
Luke Peffers; Francois Vandenberghe
Science and Technology in Atmospheric Research (STAR LLC), UNITED STATES

16:00 1D variational retrievals of boundary layer temperature profiles from ground-based microwave radiometers in an Alpine valley
P. Martinet¹; D. Cimini²; F. De Angelis³; G. Canut¹; A. Paci¹; V. Unger¹
¹CNRM UMR 3589, Meteo-France/CNRS, FRANCE
²IMAA-CNR, C.da S.Loja, ITALY
³CETEMPS, University of L'Aquila, ITALY

16:15 High-frequency temperature and wind profiling and detection of inversion with a SODAR: comparison with collocated radiosonde measurements, analysis and assimilation
C. Messager¹; F. Vandenberghe²; M. Aïdonidis³
¹Extreme Weather Expertises (EXWEXS), FRANCE
²NCAR, UNITED STATES
³Météo-France, Aéroport Brest-Bretagne, FRANCE

16:30 Assessing the reasons and consequences of the absence of cirrus and mixed-phase clouds in weather forecast models under the presence of Saharan dust
Patric Seifert; Hannes Griesche; Johannes Bühl
Leibniz Institute for Tropospheric Research, GERMANY

17:00 Towards data assimilation from a continental-scale network of ground-based microwave radiometers
Domenico Cimini¹; Francesco De Angelis²; Pauline Martinet³; Olivier Caumont³; Ulrich Löhner⁴
¹IMAA-CNR, C.da S.Loja, ITALY
²CETEMPS, University of L’Aquila, ITALY
³Météo-France, CNRM-GAME, FRANCE
⁴University of Cologne, IGM, GERMANY

17:15 Ability of a numerical weather forecast model to simulate winds within a highly complex topography
Dominique Ruffieux; Alexander Haefele
Federal Office of Meteorology and Climatology MeteoSwiss, SWITZERLAND

Thursday, June 1, 2017

08:25 Opening Announcement
Session E: Validation, Instrument Synergies, and Field Experiments/New Instruments

08:30 Quantifying lidar measurement uncertainty and spatial variability in context of model evaluation

A. Choukulkar\textsuperscript{1,2}; W.A. Brewer\textsuperscript{2}; Y. Pichugina\textsuperscript{1,2}; T.A. Bonin\textsuperscript{1,2}; R.M. Banta\textsuperscript{2}; S.P. Sandberg\textsuperscript{2}; A. Weickmann\textsuperscript{1,2}; R.M. Hardesty\textsuperscript{1,2}
\textsuperscript{1}Cooperative Institute for Research in Environmental Sciences, UNITED STATES
\textsuperscript{2}Chemical Sciences Division, National Oceanic and Atmospheric Administration, UNITED STATES

09:00 The international ceilometer inter-comparison campaign CeilInEx2015 - aerosol profiles

Ulrich Görsdorf\textsuperscript{1}; Ina Mattis\textsuperscript{2}; Margit Pattantyús-Ábrahám\textsuperscript{2}; Frank Wagner\textsuperscript{1,3}; CeilInEx2015 Team
\textsuperscript{1}Deutscher Wetterdienst, Richard-Aßmann Observatorium Lindenberg, GERMANY
\textsuperscript{2}Deutscher Wetterdienst, Meteorologisches Observatorium Hohenpeißenberg, GERMANY
\textsuperscript{3}now at Institute for Meteorology and Climate Research, Karlsruhe Institute of Technology, GERMANY

09:15 PECAN FP2 Measurements and Analysis

Belay B. Demoz\textsuperscript{1}; Ruben Delgado\textsuperscript{1}; Brian Carroll\textsuperscript{1}; Kevin Vermeesch\textsuperscript{1}; David N. Whiteman\textsuperscript{2}; Ricardo Sakai\textsuperscript{3}; Sium Tesfay\textsuperscript{3}; Lorenza Cooper\textsuperscript{3}
\textsuperscript{1}Joint Center for Earth Systems Technology, University of Maryland Baltimore County, UNITED STATES
\textsuperscript{2}NASA/Goddard Space Flight Center, UNITED STATES
\textsuperscript{3}Howard University, UNITED STATES

09:30 Ship-based thermodynamic profiles of the lower troposphere over the Atlantic Ocean

Bernhard Pospichal; Tobias Doktorowski, Andreas Foth, Ronny Engelmann
University of Cologne, GERMANY

09:45 WFIP2 experiment: comparison of 80m wind speed measurements from different available instrumentations and two operational models.

Djalalova, I\textsuperscript{1,2}; L. Bianco\textsuperscript{1,2}; J. Wilczak\textsuperscript{2}; J. Olson\textsuperscript{1,2}; J. Kenyon\textsuperscript{1,2}; K. Clawson\textsuperscript{3}; R. Eckman\textsuperscript{3}; J. Lundquist\textsuperscript{4}; A. Choukulkar\textsuperscript{1}; S. Wharton\textsuperscript{5}
\textsuperscript{1}University of Colorado/CIRES, UNITED STATES
\textsuperscript{2}NOAA/ESRL, UNITED STATES
\textsuperscript{3}NOAA/ARL, UNITED STATES
\textsuperscript{4}University of Colorado, UNITED STATES
\textsuperscript{5}DOE/LLNL, UNITED STATES

10:00 Coffee Break
10:30  **Low cost network deployable lidar for sensing range resolved water vapor and quantitative optical properties of clouds and aerosols**  
Matthew Hayman\(^1\); Scott Spuler\(^1\); Kevin Repasky\(^2\); Tammy Weckwerth\(^1\); Amin Nehrir\(^3\)  
\(^1\)Earth Observing Lab, National Center for Atmospheric Research, Boulder, CO, USA  
\(^2\)Montana State University, Electrical and Computer Engineering, Bozeman, MT, USA  
\(^3\)NASA Langley Research Center, Hampton, VA, USA

11:00  **High-stability microwave radiometers for improved humidity and temperature profiling**  
Gerrit Maschwitz; Thomas Rose; Harald Czekala  
RPG Radiometer Physics GmbH, GERMANY

11:15  **Global Observations of Temperature and Water Vapor Profiles with Coincident Cloud Ice Particle Size Information from 6U-Class Small Satellites: Tropospheric Water and Cloud ICE (TWICE) Instrument**  
Steven C. Reising\(^1\); Pekka Kangaslahti\(^2\); Erich Schlecht\(^2\); Jonathan Jiang\(^2\); Xavier Bosch-Lluis\(^1\); Mehmet Ogut\(^1\); Yury Goncharenko\(^1\); Braxton Kilmer\(^3\); Sharmila Padmanabhan\(^2\); Richard Cofield\(^2\); Nacer Chahat\(^2\)  
Shannon T. Brown\(^2\); William Deal\(^3\); Alex Zamora\(^3\); Kevin Leong\(^3\); Sean Shih\(^3\); Gerry Mei\(^3\)  
\(^1\)Microwave Systems Lab, Colorado State University, UNITED STATES  
\(^2\)Jet Propulsion Laboratory, NASA/Caltech, UNITED STATES  
\(^3\)Northrop Grumman Corporation, UNITED STATES

11:30  **Multi-function Airborne Raman Lidar (MARLi): Design and Initial**  
Zhien Wang; P. J. Wechsler; D. Wu; N. Mahon; M. Burkhart; M. Deng  
Department of Atmospheric Sciences, University of Wyoming, UNITED STATES

11:45  **The NCAR Modular Profiler development and deployment to the PECAN field campaign**  
William Brown; John Sobzak; Terry Hock; Charlie Martin  
NCAR / EOL, UNITED STATES

12:00  **Lunch**

**Session F: Water Vapor, Ozone and Trace Gases/ Temperature, Wind, Waves, and Turbulence**

13:30  **Simultaneous Measurements of CO2 Concentration and Temperature Profiles in the Lower Troposphere by Three-Wavelength DIAL using a CO2 Absorption Line of 1.6 μm Band**  
Yasukuni Shibata; Chikao Nagasawa; Makoto Abo  
Tokyo Metropolitan University, JAPAN
14:00  **Optimal Estimation of Water Vapor Profiles using a Combination of Raman Lidar and Microwave Radiometer**
Andreas Foth\(^1\); Bernhard Pospichal\(^2\)
\(^1\)Leipzig Institute for Meteorology, University of Leipzig, GERMANY
\(^2\)Institute for Geophysics and Meteorology, University of Cologne, GERMANY

14:15  **Water vapour and temperature inter-comparison effort in the framework of HYMEX-SOP1**
Benedetto De Rosa\(^1\); Paolo Di Girolamo\(^1\); Cyrille Flamant\(^2\); Donato Summa\(^1\); Olivier Bousquet\(^3\); Marco Cacciani\(^4\); Dario Stelitano\(^1\)
\(^1\)Scuola di Ingegneria, Università degli Studi della Basilicata, ITALY
\(^2\)LATMOS/IPSL, UPMC Univ. Paris 06 Sorbonne Universités, UVSQ, CNRS, France
\(^3\)Météo-France & Laboratoire de l’Atmosphère et des Cyclones, DIROI / CRC, FRANCE
\(^4\)Dipartimento di Fisica, Università di Roma “La Sapienza”, ITALY

14:30  **Lidar Observation of Volcanic Aerosols and Ozone Density in the Lower Stratosphere and Upper Troposphere over the Equator**
Chikao Nagasawa; Yasukuni Shibata; Makoto Abo
Tokyo Metropolitan University, JAPAN

14:45  **High-energy two-micron pulsed IPDA LIDAR for air and space-borne measurement of carbon dioxide**
Upendra N. Singh\(^1\); Tamer F. Refaat\(^1\); Mulugeta Petros\(^1\); Syed Ismail\(^2\); Kenneth J. Davis\(^3\)
\(^1\)NASA Langley Research Center, UNITED STATES
\(^2\)Analytical Services and Materials, Inc., UNITED STATES
\(^3\)Pennsylvania State University, UNITED STATES

15:00  **Coffee Break**

15:30  **Assessing Atmospheric Stability and Vertical Wind Profile Variability for Wind Energy Applications During PECAN Low-Level Jet Events**
Christiana Sasser\(^1\); Alexandra St.Pé\(^1\); Benjamin Tucker\(^1\); Brian Carroll\(^1\); Meredith Sperling\(^1\); Belay Demoz\(^2\); Ruben Delgado\(^2\)
\(^1\)University of Maryland, Baltimore County, UNITED STATES
\(^2\)Joint Center for Earth Systems Technology, UNITED STATES

16:00  **Using Raman Lidar Water Vapor Profile Observations to Characterize Turbulence in the Tropical Convective Boundary Layer**
David D. Turner\(^1\); Mohammed Osman\(^2\); Thijs Heus\(^3\)
\(^1\)NOAA Earth System Research Laboratory, Global Systems Division, UNITED STATES
\(^2\)University of Oklahoma, Cooperative Institute of Mesoscale Meteorology Studies, UNITED STATES
\(^3\)Cleveland State University, UNITED STATES
16:15  **Atmospheric temperature profile measurements using High Spectral Resolution Lidar.**
Ilya I. Razenkov; Edwin W. Eloranta
University of Wisconsin-Madison, UNITED STATES

16:30  **Studies of polar troposphere with the Middle Atmosphere Alomar Radar System (MAARSY) at Andøya, Norway**
Qiang Li; Markus Rapp; Andreas Schneider; Gunter Stober; Anne Schrön
1.Deutsches Zentrum für Luft- und Raumfahrt, Institut für Physik der Atmosphäre, GERMANY
2.Meteorologisches Institut München, Ludwig-Maximilian-Universität München, GERMANY
3.Leibniz Institute of Atmospheric Physics (IAP) at the Rostock University, GERMANY
4.on leave from IAP, GERMANY

16:45  **Development of a buoy based microwave radiometer for thermodynamic profiling.**
Marian Klein; Colton Dunlap; Zheng Wang; Tristen Hohman; Kurt Ramsdale
Boulder Environmental Sciences and Technology, UNITED STATES

17:00  **Break**

18:30  **Banquet Dinner in Lory Student Center Room 350 D**
09:30  Lidar and microwave radiometer synergy for thermodynamic profiling in the cloudy atmosphere
Bernhard Pospichal; Maria Barrera Verdejo; Susanne Crewell; Ulrich Loehnert; Paolo di Girolamo;
Birger Bohn
1Institute for Geophysics and Meteorology, University of Cologne, GERMANY
2Forschungszentrum Juelich, GERMANY

09:45  Twelve months of microwave and millimeter-wave tropospheric observations from the ARM West Antarctic Radiation Experiment (AWARE)
M.P. Cadeddu; V. P. Ghate
Argonne National Laboratory (ANL), UNITED STATES

10:00  Coffee Break

10:30  The structure of the humidity field in the trade winds zone: A comparison of large scale airborne lidar measurements and NWP-data
Martin Wirth; Andreas Schäfler; Silke Groß
German Aerospace Center (DLR), Institute of Atmospheric Physics, GERMANY

11:00  Phase-partitioning in mixed-phase clouds - can we characterize the entire vertical column?
Heike Kalesse1; Edward Luke2; Patric Seifert1; Johannes Bühl1
1Leibniz Institute for Tropospheric Research (TROPOS), GERMANY
2Brookhaven National Laboratory, UNITED STATES

11:15  Assess the Power Generation Performance of Wind Turbines Using Lidar Observation and WRF Simulations
Chuan-Chi Tu; Syuan-Cing Wu; Pay-Liam Lin
National Central University, TAIWAN

11:30  Using scanning Doppler lidars for the improvement of wind forecasting in complex terrain
Y. Pichugina; R. Banta; T. Bonin; A. Brewer; A. Choukulkar; S. Sandberg; A. Weickmann
Cooperative Institute for Research in Environmental Studies (CIRES), University of Colorado, UNITED STATES

11:45  Turbulence Dissipation Rates in the Planetary Boundary Layer from Wind Profiling Radars and Mesoscale Numerical Weather Prediction Models during WFIP2
Katherine McCaffrey; Laura Bianco; James M. Wilczak; Joseph B. Olson; Jaymes Kenyon
CIRES/NOAA-ESRL, UNITED STATES

12:00  Closing Remarks

12:15  Lunch