

2012 Young Scientist Symposium on Atmospheric Research

Hosted by:
CSU AAAR Student Chapter &
The up-and-coming AMS Local Chapter

October 05, 2012
Department of Atmospheric Science
Colorado State University
Fort Collins, Colorado

Schedule of Events

9:30 Sign-in and Refreshments (ATS Room 100)

9:50 Welcome and Opening Remarks
Christina McCluskey and Lauren Potter

Session 1 (10:00 – 11:00) Chair: Ezra Levin

10:00 Addressing Exposure to Industrial Odors in Globeville, Denver
Blayne Morgan, University of Colorado at Boulder

10:15 Spatiotemporal Assessment of Fine Particle Exposures During Commuting Activities
Kirsten Koehler, Colorado State University

10:30 Bioaerosols in the Remedios River, Mexico City
Zitely Tzompa, Colorado State University

11:45 Refreshment Break

Session 2 (11:00 – 12:00) Chair: Chris Slocum

11:00 Synoptic Control of Heavy-Rain-Producing Convective Training Episodes
John Peters, Colorado State University

11:15 Sensitivity of a Simulated Deep Convective Storm to WRF Microphysical Schemes and Horizontal Resolution
Annareli Morales, Colorado State University

11:30 Aerosol-Cloud-Land Surface Interactions and Mesoscale Circulations in an Idealized Modeling Framework
Leah Grant, Colorado State University

11:45 The Hotplate Precipitation Rate Sensor
Adam Wettlaufer, University of Wyoming

12:00 Lunch

Session 3 (12:45 – 1:45) Chair: Christina McCluskey

- 12:45 Effects of particle size and interactions with sulfur dioxide on iron solubility
Benton Cartledge, University of Denver
- 1:00 Investigating Types and Sources of Organic Aerosol in the Rocky Mountains Using Aerosol
Mass Spectrometry
Misha Schurman, Colorado State University
- 1:15 Secondary organic aerosol formation from glyoxal during CalNex 2010
Christoph Knote, NCAR
- 1:30 Thermal Denuder (TD) Treatment for Aerosol Volatility Measurements: A Presentation of
the Current Literature
Penny P. Osborne, Colorado State University
- 1:45 Refreshment Break

Session 4 (2:00 – 3:00) Chair: Aaron Pina

- 2:00 The Influence of the MJO on Upstream Precursors to African Easterly Waves
Gus Alaka, Colorado State University
- 2:15 Height variable entrainment in a GCM
Walter Hannah, Colorado State University
- 2:30 An assessment of tropical belt width diagnostics
Nicholas Davis, Colorado State University
- 2:45 The Influence of Small-scale Dynamics on Tropical Cyclone Intensity
Christopher J Slocum, Colorado State University

Poster Session (3:00 – 3:45) - ATS Weather Lab

Investigation of Atmospheric Coupling with Solar Variations
Sam Liner, University of Colorado at Boulder

Difficulties in simulating ice initiation in Arctic stratus
James M. Carpenter, Colorado State University

Preliminary Composition Results of Simulated Cloud Photo-Oxidation Studies
Ali Boris, Colorado State University

Ice nuclei produced from prescribed fires in Southeastern United States
Christina McCluskey, Colorado State University

Characterizing the Influence of Transport Variability on Aerosol Concentrations at Mauna Loa
Observatory
Lauren Potter, Colorado State University