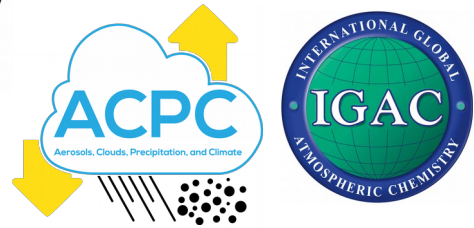


## Aerosols, Clouds, Precipitation and Climate (ACPC)

### 639. WE-Heraeus-Seminar

Physikzentrum Bad Honnef



### Programme

#### Sunday, 2 April 2017

- 18:00 h Buffet supper
- 20:00 h Opening (Danny Rosenfeld / Johannes Quaas)  
Welcome by WE Heraeus foundation
- 20:30 h ACPC and its supporting programmes  
(Megan Melamed, IGAC, via video)
- 20:45 h Brief introduction of participants

#### Monday, 3 April 2017 – deep clouds

##### *a. Observations*

- 8.30 h Ann Fridlind: *Towards improved observational constraint of deep convection simulations: Expanding assessments of closure in an observation-limited context*
- 8.50 h Andi Andreae: *CCN measurements in the Houston area during DISCOVER-AQ*
- 9.10 h Danny Rosenfeld: *Combined contrasting satellite, polarimetric radar and lightning results*
- 9.30 h Marcus van Lieer-Walqui: *Houston updraft tracking using NEXRAD Kdp and NU-WRF*
- 9.50 h Discussion
- 10.15 h Coffee
- 10.40 h Jiaxi Hu: *Polarimetric radar convective cell tracking reveals large sensitivity of cloud precipitation and electrification properties to CCN*
- 11.00 h Alexander Ryzhkov: *Polarimetric Radar Microphysical and Thermodynamic Retrievals*
- 11.20 h Jeff Snyder: *Polarimetric Radar Microphysical and Thermodynamic Retrievals*
- 11.40 h Pavlos Kollias: *Radar resources for the Houston deep convective clouds study: Discussion on measurement capabilities and limitations*
- 12.00 h Wolfram Wobrock: *On the vertical structure of IWC and 3D wind in deep tropical convection observed during the HIWC-HAIC- experiment at Darwin*
- 12.20 h Discussion
- 12.45 h Lunch

##### *b. Simulations*

- 14.30 h Sue van den Heever: *Deep Convective Cloud Group – Modeling Approach*
- 14.50 h Daniel Hernandez-Deckers: *Tracking cumulus thermals in WRF-LES*
- 15.10 h Peter Marinescu: *Deep Convective Cloud Simulations in Clean and Polluted Conditions: 19-20 June 2013 Houston Case*
- 15.30 h Bethan White: *Deep Convective Cloud Simulations in Clean and Polluted Conditions: 19-20 June 2013 Houston Case*
- 15.50 h Corinna Hoose: *Simulation of deep convective clouds with COSMO and advanced treatments of ice nucleating particles*
- 16.10 h Martin Köhler: *Convection and anvil response*
- 16.30 h Alexander Khain / Jacob Shpund: *Improved SBM and its application to the Houston case*
- 16.50 h Coffee
- 17.20 h Discussion
- 18.00 h Poster session
- 20.00 h Dinner

## Tuesday, 4 April 2017 – shallow clouds

- 8.30 h Rob Wood: *Shallow working group overview*  
*a. Satellite observations*
- 8.50 h Dan Grosvenor: *Droplet concentration retrievals*
- 9.10 h Ralf Bennartz: *Regional and global estimates of droplet number concentration of boundary layer clouds from visible/near-infrared observations*
- 9.30 h Dipu Sudhakar: *Exploring the aerosol-cloud interaction metrics for the VOCALS marine stratocumulus case*
- 9.50 h Discussion
- 10.20 h Coffee
- 10.50 h Hartwig Deneke: *Geostationary Satellite Observations of Shallow Clouds*
- 11.10 h Jan Cermak: *Aerosol-cloud interactions and transitions: Statistical analyses based on satellite*
- 11.30 h Kentaroh Suzuki: *Combined use of satellite observations and global models for studying aerosol-cloud-precipitation interactions*
- 11.50 h Ralph Kahn: *Satellite Contributions to ACPC*
- 12.10 h Discussion
- 12.30 h Lunch
- b. Modelling*
- 14.00 h Zach Lebo, Adrian Hill: *CMW Update: Comparison of aerosol-aware microphysics schemes and sensitivities in a kinematic framework*
- 14.20 h Tom Goren, Graham Feingold: *Trajectory simulation status*
- 14.40 h Annette Miltenberger: *Aerosol-cloud interaction in a meteorological ensemble of convective precipitation from COPE*
- 15.00 h Dan Grosvenor: *The relative importance of macrophysical and cloud albedo changes for aerosol induced radiative effects in stratocumulus*
- 15.20 h Discussion
- 15.40 h Coffee
- 16.10 h Bernhard Vogel: *COSMO results*
- 16.30 h Montse Costa Suros: *Investigating the response to doubling the CCN concentration in ICON-LEM simulations*
- 16.50 h Graham Feingold: *Stratocumulus to cumulus transitions: effects of biomass burning and precipitation*
- 17.10 h Discussion
- 18.30 h Poster session
- 20.00 h Heraeus Dinner

## Wednesday, 5 April 2017 – new ideas & way forward

- 9.00 h Bjorn Stevens: *EUREC4A campaign*
- 9.20 h Discussion Shallow case
- 12.30 h Lunch
- 14.00 h Discussion Deep case
- 17:00 h End of programme / SSC meeting
- 20:00 h Dinner