<table>
<thead>
<tr>
<th>Time</th>
<th>Session/Poster</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-8:15</td>
<td>Welcoming remarks</td>
<td>Z. Levin, L. Barrie, G. Raga</td>
<td>Keynote Presentation: Aerosol impacts on deep convective clouds by William Cotton</td>
</tr>
<tr>
<td>8:15-8:45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:45-10:00</td>
<td>Plenary Oral Session 1: BASIC CLOUD PHYSICS</td>
<td>Invited: Roland List</td>
<td>New comprehensive equations for graupel and hailstone growth</td>
</tr>
<tr>
<td>8:45-10:00</td>
<td></td>
<td>Tsuneya Takahashi, Norihiko Fukuta, Takayuki Hashimoto</td>
<td>Vertical supercooled cloud tunnel studies on the growth of dendritic snow crystals</td>
</tr>
<tr>
<td>8:45-10:00</td>
<td></td>
<td>Gabor Vali</td>
<td>Surface sources of ice particles in mountain clouds</td>
</tr>
<tr>
<td>8:45-10:00</td>
<td></td>
<td>Guillermo Montero-Martinez, Raymond A. Shaw, Alexander B. Kostinski, Fernando Garcia-Garcia</td>
<td>Fall speed measurements of raindrops at the ground during precipitation events in Mexico.</td>
</tr>
<tr>
<td>8:45-10:00</td>
<td></td>
<td>Szymon P. Malinowski, Piotr Korczyk, Tomasz A. Kowalewski</td>
<td>Turbulent mixing of cloud with the environment: two-phase evaporating flow as seen by Particle Imaging Velocimetry.</td>
</tr>
<tr>
<td>8:45-10:00</td>
<td>Coffee Break</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30-12:15</td>
<td>Plenary Oral Session 1: BASIC CLOUD PHYSICS (Continued)</td>
<td>Christopher R. Ruehl, Patrick Y. Chuang, Athanasios Nenes</td>
<td>Distinct cloud droplet nucleation kinetics observed above the marine boundary layer</td>
</tr>
<tr>
<td>10:30-12:15</td>
<td></td>
<td>Heike Eichler, André Ehrlich, Manfred Wendisch, Bernhard Mayer</td>
<td>Influence of Ice Crystal Shape on Retrieval of Cirrus Optical Thickness and Effective Radius</td>
</tr>
<tr>
<td>10:30-12:15</td>
<td></td>
<td>Jennifer M. Comstock, Ruei-Fong Lin, David O. Starr</td>
<td>Understanding Ice Supersaturation, Particle Growth, and Number Concentration in Cirrus Clouds</td>
</tr>
<tr>
<td>10:30-12:15</td>
<td></td>
<td>Lian-Ping Wang, Bogdan Rosa, Wojciech W. Grabowski</td>
<td>Turbulent collision-coalescence of cloud droplets and its impact on warm rain initiation</td>
</tr>
<tr>
<td>10:30-12:15</td>
<td></td>
<td>Steven K. Krueger, Jackyoon Oh, Alan R. Kerstein</td>
<td>Enhancement of coalescence due to droplet inertia in turbulent clouds</td>
</tr>
<tr>
<td>10:30-12:15</td>
<td></td>
<td>Jan Schlottke, Winfried Straub, Klaus D. Beheng, Bernhard Weigand</td>
<td>Numerical investigation of collision-induced breakup of raindrops. part I: Methodology as well as dependencies on collision energy and eccentricity</td>
</tr>
<tr>
<td>10:30-12:15</td>
<td></td>
<td>Hugh C. Morrison, Wojciech W. Grabowski</td>
<td>A novel approach for representing ice microphysics in models</td>
</tr>
<tr>
<td>12:15-13:15</td>
<td>Buffet Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13:15-14:45</td>
<td>Poster Session P1: BASIC CLOUD PHYSICS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Session</td>
<td>Title</td>
<td>Authors</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>P1.1</td>
<td>Alex b. Kostinski, Will Cantrell</td>
<td>Entropic Aspects of Supercooled Droplet Freezing</td>
<td></td>
</tr>
<tr>
<td>P1.2</td>
<td>Alexander Avramov, Jerry Y. Harrington</td>
<td>The influence of crystal habit on simulations of mixed-phase Arctic stratus clouds</td>
<td></td>
</tr>
<tr>
<td>P1.3</td>
<td>Alexei Korolev, George Isaac</td>
<td>The effect of spatial averaging on the relative humidity and phase composition of clouds</td>
<td></td>
</tr>
<tr>
<td>P1.4</td>
<td>Axel Seifert</td>
<td>On the parameterization of evaporation of raindrops below cloud base</td>
<td></td>
</tr>
<tr>
<td>P1.5</td>
<td>Boris Y. Grits, Mark Pinsky, Aleksander Khain</td>
<td>Calculation of collision rate between small non-spherical particles in a turbulent flow</td>
<td></td>
</tr>
<tr>
<td>P1.6</td>
<td>Charmaine N. Franklin</td>
<td>Warm rain microphysics parameterisations that include the effect of turbulence</td>
<td></td>
</tr>
<tr>
<td>P1.7</td>
<td>Christopher A. Jeffery</td>
<td>Droplet radius vs sub saturation evaporative timescales: Which timescale has a greater influence on droplet spectra?</td>
<td></td>
</tr>
<tr>
<td>P1.8</td>
<td>Daniel Abreu, Roland List</td>
<td>Motion patterns of gyrating spheroids for various degrees of spin modulation</td>
<td></td>
</tr>
<tr>
<td>P1.9</td>
<td>Dirk Hoffmann, Christian Weller, Thomas Schaefer, Hartmut Herrmann</td>
<td>Laboratory studies on cloud chemistry processes</td>
<td></td>
</tr>
<tr>
<td>P1.10</td>
<td>Frédéric Burnet, Jean-Louis Brenguier</td>
<td>Entrainment and Mixing in Warm Convective Clouds: Effects on Droplet Spectra and on the Onset of Precipitation</td>
<td></td>
</tr>
<tr>
<td>P1.11</td>
<td>Graham Feingold, Patrick Chuang, Jennifer Small, Hongli Jiang, Hafildi Jonsson, Steven Krueger</td>
<td>Assessment of Aerosol and Entrainment-Mixing Processes on Drop Size distributions in Warm Cumulus</td>
<td></td>
</tr>
<tr>
<td>P1.12</td>
<td>Jacob P. Fugal, Hansen Nordsiek, Jiang Lu, Ewe Wei Saw, Raymond. Shaw</td>
<td>Lagrangian Observations of Inertial, Settling Cloud Particles in Turbulent Flow</td>
<td></td>
</tr>
<tr>
<td>P1.13</td>
<td>Jason A. Milbrandt, Ron McTaggart-Cowan</td>
<td>A Semi-Double-Moment Bulk Scheme</td>
<td></td>
</tr>
<tr>
<td>P1.14</td>
<td>Jerry Y. Harrington, Lindsay Sheridan, Dennis Lamb</td>
<td>Parameterization of the deposition coefficient for bulk microphysical models: Implications for simulated cirrus.</td>
<td></td>
</tr>
<tr>
<td>P1.15</td>
<td>Joanna Slawinska, Hanna Pawlowska, Hugh Morrison, Wojciech W. Grabowski</td>
<td>Effects of homogeneous versus inhomogeneous mixing on trade-wind convection as simulated by a two-moment bulk microphysics scheme</td>
<td></td>
</tr>
<tr>
<td>P1.16</td>
<td>Karoline Diehl, Nadine von Blohn, Stephan Borrmann, Subir K. Mitra</td>
<td>Laboratory experiments on growth rates, regimes, and collection kernels during riming</td>
<td></td>
</tr>
<tr>
<td>P1.17</td>
<td>Lance R. Collins, Sathyanarayana Ayyalasomayajula, Raymond A. Shaw, Zellman Warhaft</td>
<td>Experimental measurements and numerical modeling of inertial droplets in high-Reynolds-number turbulence</td>
<td></td>
</tr>
<tr>
<td>P1.18</td>
<td>Lester Alfonso, Graciela B. Raga, Darrel Baumgardner</td>
<td>A stochastic model for the collection growth of ice particles in mixed-phase clouds</td>
<td></td>
</tr>
<tr>
<td>P1.19</td>
<td>Lester Alfonso, Graciela B. Raga, Darrel Baumgardner</td>
<td>Monte Carlo simulations of two-component drop growth by stochastic coalescence</td>
<td></td>
</tr>
<tr>
<td>P1.20</td>
<td>Lian-Ping Wang, Bogdan Rosa, Hui Gao, Wojciech W. Grabowski</td>
<td>Recent advances in modeling aerodynamic interaction and collision efficiency of cloud droplets</td>
<td></td>
</tr>
</tbody>
</table>
P1.21 Mahlon P. Rambukkange, Johannes Verlinde, Pavlos Kollias, Edward Luke
A new mode of ice nucleation?

P1.22 Miklós Szakáll, Karoline Diehl, Subir K. Mitra, Stephan Borrmann
Shape oscillations of freely falling raindrops

P1.23 Mladjen Curic, Dejan Jane, Vladan Vuckovic
The Role of Truncated Spectrum in Accretion Rate Calculations

P1.24 Nadine von Blohn, Karoline Diehl, Subir K. Mitra, Stephan Borrmann
Retention of trace gases during riming of ice particles and snow flakes

P1.25 Norihiko Fukuta
Diffusion-Kinetic Droplet Growth Theory With the Moving Surface-Boundary Effect (DKMB) for Cloud Study

P1.26 Roland List, Daniel Abreu
Shape evolution of growing hailstones as function of gyration parameters

P1.27 Roland List, Daniel Abreu
Drop shedding from growing hailstones, processes and predictions

P1.28 Sandra Turner, Jean-Louis Brenguier, Christine Lac
Parameterization of subgrid scale cloud variability in mesoscale models

P1.29 Sarah Berthet, Maud Leriche, Jean-Pierre Pinty
Scavenging of aerosol by rain in a cloud resolving model

P1.30 Stefanie Wassermann, Michael Kunz, Christoph Kottmeier
Mechanisms of Precipitation over complex terrain

P1.31 Steven K. Krueger
Fine-scale modeling of entrainment and mixing of cloudy and clear air

P1.32 Vladimir Smorodin, Norihiko Fukuta
The Fuchs boundary sphere method in the theory of droplet growth

P1.33 Xing-Can Jia, Sheng-Jie Niu
Analyses of Raindrop Size Distributions from Stratiform and Convective Clouds over Guyuan, China

P1.34 Yasushi Fujiyoshi, Ikuyo Yamamura, Nobuhiro Nagumo, Katsuhiro Nakagawa, Ken-ichiro Muramoto, Toyoshi Shimomai
The maximum size of raindrops - Can it be a proxy of precipitation climatology?

13:15-14:45 Poster Session P2: STRATUS CLOUDS
Chairperson: TBD

P2.1 Andreas Mühlbauer, Ulrike Lohmann
Modeling warm-phase orographic clouds and precipitation at the Jungfraujoch in Switzerland

P2.2 Anping Sun, Guoguang Zheng, Guoqing Zhang
Preliminary Investigations of Orographic Cloud Characteristics over the Southern Slope Area of Qilian Mountain

P2.3 Chang K. Kim, Seong S. Yum
Understanding of the formation mechanism of cold water fogs off the west coast of the Korean Peninsula

P2.4 David Painemal, Paquita Zuidema
Cloud droplet number concentration variability over the Southeast Pacific Stratocumulus region

P2.5 Dione L. Rossiter, Jennifer D. Small, Chuang Y. Chuang
Observations of Size-resolved Drizzle Rates in Marine Stratocumulus
P2.6 Ewan J. O’Connor
Using Doppler lidar and radar to evaluate the representation of drizzle in models

P2.7 Faisal S. Boudala, George A. Isaac
Parameterization of ice particle spectra in extra tropical clouds: Normalization approach

P2.8 Faisal S. Boudala, George A. Isaac, Andre Tremblay
A new bulk ice microphysical scheme based on in-situ observations

P2.9 Frederick Chosson
Aerosol Indirect effects in ship tracks: Numerical Simulations

P2.10 Hermann E. Gerber, Steven K. Krueger
POST - Physics Of Stratocumulus Top

P2.11 Jiefan Yang, Hengchi Lei
Study on the Stratiform Cloud Numerical Model and Actual Observation

P2.12 Jing Sun, Pengyun Wang
Numerical study on microphysical processes of two different snowfall cases in North China

P2.13 Kenji Suzuki, Shunsuke Shigeto, Takumi Koga, Kazue Morinaga, Kunio Yoneyama
Microphysical structures of stratiform clouds associated with the MJO observed during MISMO project

P2.14 Keun Y. Song, Seong S. Yum
LES model simulations of CCN impacts on stratocumulus microphysics and dynamics

P2.15 Lei Meng, Sheng-Jie Niu, Ning Luo, Ji-Fen Wen
Analysis of the Evolution of Microphysical Characteristics of fog droplets in rime and glaze

P2.16 Ling-Ling Wang, Sheng-Jie Niu, Chun-Song Lu, Jie Xu, Ning Luo, Jun-Wei Yu
An analysis of characteristic fog-droplet size distributions on Guizhou Yunwu Mountain

P2.17 Marcin J. Kurowski, Krzysztof E. Haman, Wojciech W. Grabowski, Szymon P. Malinowski
Observations and numerical modeling of entrainment and mixing near the top of marine stratocumulus.

P2.18 Natalia A. Bezrukova
Climatology of the glaze and rime on the Russian Arctic coast stations

P2.19 P.M.M. Soares, P.M.A. Miranda, A. Catarino
Momentum fluxes in the cloudy boundary layer: LES diagnostics

P2.20 Raymond A. Shaw, Holger Siebert
Correlations of Turbulence and Droplet Size from Simultaneous, High-Resolution Measurements in Stratocumulus Clouds

P2.21 Sabine Goeke, Leila Konkola
Interpretation of polarization radar measurements of the melting layer

P2.22 Sheng-Jie Niu, Jie Xu, Chun-Song Lu, Jing-Jing Lu, Wei-Wei Wang, Zi-Hua Li
Analysis of the microphysical structures of ultra heavy fog around Nanjing in the 2006 winter

P2.23 Simon P. de Szoeke, Chris W. Fairall
NOAA ship observations of southeast tropical Pacific stratus clouds

P2.24 Svitlana V. Krakovska
Tests of bulk cloud microphysics parameterizations in the explicit cloud model

P2.25 Takamichi Iguchi, Teruyuki Nakajima, Alexander Khain, Kazuo Saito, Toshihiko Takemura, Hajime Okamoto, Tomoaki Nishizawa
A simulation of radar- and lidar-derived vertical structures of frontal cloud using a bin-type cloud microphysical model

P2.26 Tempei Hashino, Greg J. Tripoli
### Evolution of Particle Size Distribution and Ice Crystal Habit

**P2.27** Tianyu Chen, Yue Chen  
Primary Observation Results of Orographic Clouds on North Slop of Qi-Lian mt.

**P2.28** Virendra P. Ghate, Bruce A. Albrecht  
Turbulence Structure of Continental Boundary Layer Clouds

**P2.29** Weiguo Liu, Qijun Liu  
A Numerical Simulation of Orographic Cloud over Qilian Mountains in Summer by ARPS model with Improved ice Microphysical Scheme

**P2.30** Xincheng Ma, Qiang Zhang, MengYu Huang, Hongyu Li  
Observed Macrosopical and Microphysical Structure of Stratus Clouds in Beijing

**P2.31** Yanchea Hong, Feifei Zhou, Zongxiu Liu  
The Study on Potential of Artificial Precipitation Enhancement for Stratus Clouds System

**P2.32** Yuquan Zhou, Zhijin Hu, Shuhai Zhao  
Observational Study on Stratiform Cloud Structure and Cloud-seeding Condition of Precipitation Enhancement Based on Observations of TRMM Satellite and Aircraft

**P2.33** Zhaoxia Hu, Hengchi Lei, Xueliang Guo, Dezhen Ji, Yanbin 1. Qi, Xiaoqing Zhang  
Studies of the Structure of a Stratiform Cloud and the Physical Processes of Precipitation Formation

**P2.34** Zhen Zhao, HengChi Lei  
A Numerical Simulation of Cloud Physical Structure and Microphysical Processes Associated with Stratiform Precipitation in Northwest China

**P2.35** Zlatko Vukovic  
The conditions and depth of relative homogenous cloud layer in the stratus clouds

### Plenary Oral Session 2: STRATUS CLOUDS

**Chairperson:** TBD

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
</tr>
</thead>
</table>
| 14:45-15:00 | 2.1     | Invited: Bruce Albrecht  
Aerosol-Cloud-Drizzle Interactions in Marine Stratocumulus—Nature’s Way and Man’s Way |
| 15:00-15:15 | 2.2     | Wolfram Wobrock, Jean-François Gayet, Guillaume Mioche, Alfons Schwarzenböck, Andrea. Flossmann  
Microphysical characteristics of Arctic stratus observed during ASTAR2 - a comparison between observations and detailed microphysical modeling |
| 15:15-15:30 | 2.3     | Holger Siebert, Raymond Shaw  
The small-scale structure of turbulence in marine stratocumulus |
| 15:30-15:45 | 2.4     | Lee D. Smith, Anthony J. Illingworth  
Global statistics of the liquid water path and drizzle occurrence in liquid water clouds derived from CloudSat using the attenuation of the ocean return. |
| 15:45-16:00 | 2.5     | Kenneth Sassen  
As Snow Changes to Rain: Understanding the Vicissitudes of Electromagnetic Scattering Through the Melting Layer (from Above and Below) |
| 16:00-16:15 | 2.6     | Hailong Wang, Graham Feingold, Huwen Xue  
Modeling Aerosol Effects on the Formation of Pockets of Open Cells in Marine Stratocumulus Using an Embedded LES in a Mesoscale Model |
| 16:15-16:30 | 2.7     | Tatu Anttila, Veli-Matti Kerminen  
On the contribution of Aitken mode particles to cloud droplet populations at clean continental areas - a parametric sentivity study |
| 16:30-16:45 | 2.8     | Leehi Magaritz, Mark Pinsky, Alexander Khain  
Drizzle formation in stratiform clouds: random nature and lucky parcels |

**END OF SESSIONS**
19:00-20:00 Welcome Cocktail