2nd Meeting Call

Third International Workshop on Space-based Snowfall Measurement (3rd IWSSM)

30 March-2 April 2011 Grainau, near Munich, Germany

Program Committee

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Workshop website: <u>http://cimss.ssec.wisc.edu/iwssm/2011</u>

The program committee invites you to attend the 3rd International Workshop on Spacebased Snowfall Measurement to be held in Grainau, Germany. The workshop is sponsored by the International Precipitation Working Group (IPWG), the GEWEX Radiation Panel (GRP), by NASA's CloudSat mission, and by NASA's Precipitation Measurement Missions (PMM) Program on behalf of the Global Precipitation Measurement (GPM) Mission.

The goal of the workshop is to bring together researchers focusing on the measurement of snowfall from space using active and passive microwave sensors for the purpose of assessing the state of the science and measurement technology and to recommend future directions in research and technology development. The topics of interest include instrument development, space-borne missions and concepts, retrieval techniques, assimilation systems, modeling of microwave radiative transfer within snow particles and snowy air, modeling of microphysical processes and ground validation.

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1) Workshop format

The workshop will focus around the topics identified in the outline above. A limited number of invited research presentations will set the stage for subsequent working group discussions where the state of the art will be discussed and future directions of research will be identified. Attendees will be asked to contribute to a workshop report that summarizes the findings of this workshop.

2) Draft Program

The workshop will be convened the morning of Wednesday, March 30, 2011 and end on the afternoon of Saturday, April 2, 2011.

29 March (Tuesday)			
Arrival/registration			
30 March (Wednesday)			
All day:	Invited overview talks		
Early evening:	Working group formation		
Evening:	Reception/Icebreaker		
31 March (Thursday)			
Morning:	WG Meetings		
Early Afternoon:	Plenary WG initial reports		
Afternoon:	WG Meetings		
1 April (Friday)			
Morning - Early afternoon:	Visit Schneefernerhaus on Zugspitze		
Afternoon/Evening:	WG Meetings		
2 April (Saturday)	-		
Final Plenary Session and WG Reports			
Noon: Depart			

3) Working Groups

Applications

- Critical measurements needed for: climate modeling, hydrology, ice microphysical modeling, QPE, NWP, other.
- What are the requirements for GV and field experiments

Radiative Properties of Falling Snow

- Ice radiative properties modeling issues: Non-spherical particles, habit, size distributions
- Andy Heymsfield challenge on radar reflectivity modeling
- Supercooled liquid water
- Other forward modeling issues (e.g. emissivity)
- Radiative closure

Global and Regional Detection and Estimation

- Retrieval issues Radar
- Radiometer synergy
- Current operational algorithms for detection/estimation
- What can we achieve within 3, 10 years?

Missions and Concepts

- Science to be addressed
- Technology and measurement synergies
- Technology gaps, next steps
- New spaceborne missions
- New ground-base remote sensing technology

Validation

- New airborne and ground base technology
- Measurements for uncertainties, representativeness
- Field campaigns
- Regional/global validation approaches
- Long-term GV efforts
- Additional needs for validation
- International coordination

4) Workshop Registration

Registration for the workshop is now open at:

- Registration fee will be \$300 and can be paid by via our secure credit card payment form on the registration website. Go to the meeting website at <u>http://cimss.ssec.wisc.edu/iwssm/2011</u> and click on the Registration link in the top bar
- Late registration: For participants registering after 2/28/2011, registration fee will be \$400
- Hotel reservations will have to be made directly with the hotel.

5) Hotel information

The workshop will be held at the Hotel am Badersee in Grainau, Germany, where a set of 50 rooms has been blocked for the conference. Single rooms are available at Euro 82,-per night.

- Hotel reservations will have to be made directly with the hotel.
- Hotel website is: http://www.hotelambadersee.de/en/
- Booking code: "IPWG Snowfall"
- Booking instructions:
 Phone: Call hotel and make reservation by phone: +49-8821-8210
 Web: Use the online *contact* form: http://www.hotelambadersee.de/en/kontakt.php (Do NOT use the online *booking* form)
 E-mail: info@hotelambadersee.de

6) Driving direction from Munich airport

Travel either by rental car or public transport (recommended). Details can be found on the workshop website: <u>http://cimss.ssec.wisc.edu/iwssm/2011/lodging.html</u>

7) Tour Schneefernerhaus

On Friday morning, a tour of the Environmental Research Station "Schneefernerhaus" (http://www.schneefernerhaus.de/e-ufs.htm), located in 2650 m ASL at the close-by Mt. Zugspitze, will be conducted during the meeting. It will comprise a demonstration of the ground-based snow, water vapor, liquid water, temperature and aerosol measurement facilities, which are available for ground validation.