4th International Summer Snowfall Workshop

Program

Time	Monday
13:15	Opening Bibliotheca Albertina, Beethovenstraße 6, 04107 Leipzig
13:30	**Keynote 1** Recent progress in studies of secondary ice production. Alexei Korolev
14:00	**Session 1: "In situ observations & laboratory studies".** Chairs: Veronika Ettrichrätz & Jen Stout
	MASCDB: a database of images, descriptors and microphysical properties of individual snowflakes in free fall. Alexis Berne in substitution of Jacopo Grazioli
14:15	**Laboratory investigation of the fragmentation of ice particles due to collison.** Miklós Szakáll
14:30	**Retrieval of pristine ice and snow crystals mass-size relationship from in-situ measurement.** Emmanuel Fontaine
14:45	**In-situ Cloud Particle Size Distribution Sensor Intercomparison from Puijo Tower, Kuopio.** Antonia Radlwimmer
15:00	Coffee break
15:30	**Session 2: "Ice microphysical processes - riming".** Chairs: Dmitri Moissev & Leonie von Terzi
	Does turbulence enhance ice particle collisional growth and sedimentation velocity? A radar-based statistical assessment in Arctic low-level mixed-phase clouds. Giovanni Chellini
15:45	**Exploring spatial scales and favorable conditions of riming using long-term cloud radar observations.** Paul Ockenfuß
16:00	**Topographic Effects on Stratiform Precipitation Observed by Vertically Pointing Micro Rain Radars at Ridge and Valley Sites in the Liupan Mountains Area, Northwest China.** Zhanyu Yao
16:15	**Occurrence and variability of riming during HALO-(AC)³.** Nina Maherndl
16:30	Discussion
17:00	Ice breaker - drinks & finger food
17:15	Poster session 1

Time	Tuesday
09:00	**Keynote 2** **Snowfall microphysics: a dual-frequency and Doppler spectral radar perspective.** Alexis Berne in substitution of Anne-Claire Billault-Roux
09:30	**Session 3: "Polarimetric & multi-frequency radar".** Chairs: Giovanni Chellini & Max Maahn
	Analysis of novel measurements of G-band Doppler spectra in ice. Karina McCusker
09:45	**Augmenting the German weather radar network with vertically pointing cloud radars: implications of resolution and attenuation.** Christian Heske
10:00	**Identification of riming and aggregation combining in-cloud particle shape and spectrally resolved Doppler cloud radar observations.** Audrey Teisseire
10:15	**Optimized radar relations for snow estimation.** Petar Bukovcic

10:30	Coffee break
11:00	**Complexity of Snowflakes - A Case Study of the Benefits of Synergy between a snowfall camera VISSS, 94 GHz Radar, and PAMTRA.** Veronika Ettrichrätz
11:15	**Multimodal snowfall features in C-band radar Doppler spectra.** Mathias Gergely
11:30	**Multi-frequency radar signatures of snow ： A survey from tropics to Antarctica.** Haoran Li
11:45	Discussion
12:15	Break
13:15	**Session 4: "Snowflake scattering & modeling".** Chairs: Nina Maherndl & Chris Westbrook
	Ice microphysical processes in the dendritic growth layer: can we close current knowledge gaps by combining novel cloud radar observations with Lagrangian Monte-Carlo particle modeling? Leonie von Terzi
13:30	**Simulating Realistic Ice and Snow Scattering Properties for the ICON Model's Radar Forward Operator EMVORADO.** Soumi Dutta
13:45	**The polarimetric radar signatures of oriented aggregates.** Robert Schrom
14:00	Discussion
14:30	Poster session 2
15:00	(parallel) Coffee break
15:15	Poster session 2
15:45	break
16:30	**Dragon boat trip,** Klingerweg 2, 04229 Leipzig
19:00	**Early career pub evening. 7pm at OSKAR, Harkortstraße 21, 04107 Leipzig**

Time	**Wednesday**
09:00	***Continuation of Session 4*** *(Chairs: Nina Maherndl & Chris Westbrook)*
	A spectral-bin model setup for simulation of aerosol impacts on mixed-phase cloud evolution and its footprint in radar observations. Junghwa Lee
09:15	**Quantifying the efficiency of submicron-sized aerosol scavenging by snow and wet deposition.** Darko Savić
09:30	**Sensitivity of Physical Precipitation Retrieval to Mass-Dimension Relation.** Kwo-sen Kuo
09:45	**Session 5: "Satellite observations and field campaigns".** Chairs: Stefan Kneifel & Haoran Li
	The Polarized Submillimeter Ice-Cloud Radiometer (PolSIR): Observing the diurnal cycle of ice clouds in the tropics and sub-tropics. Ralf Bennartz
10:00	**The EUMETSAT Polar System - Second Generation (EPS-SG) Microwave Imager (MWI) and Ice Cloud Imager (ICI) missions.** Vinia Mattioli
10:15	**Pre-launch preparations for the Ice Cloud Imager: probabilistic retrievals of cloud ice.** Vinia Mattioli
10:30	Coffee break
11:00	**Evaluation of snowfall retrieval capabilities of the Arctic Weather Satellite mission: analysis of some case studies.** Andrea Camplani

11:15	**Variability and predictability of precipitation type and accumulation during near-freezing surface conditions.** Katja Friedrich
11:30	**Radar-Based Microphysical Analysis of Natural and Seeded Snowfall in the Payette Mountains of Idaho.** Katja Friedrich
11:45	Discussion
12:15	Break
13:15	**Keynote 4** **The Influence of High-Latitude Atmospheric Rivers on Cold-Season Precipitation: A Satellite and Ground-based Perspective.** Claire Pettersen
13:45	**Cancelled - Snow Observations in Climatic Wind Tunnel and Natural environments.** Ismail Gultepe
	Toward a better ice cloud product for the next generation spaceborne radiometers. Jie Gong
14:00	**Spatial variability in the occurrence of summer precipitation over a 30 km transect in the Sør Rondane Mountains, Antarctica.** Alexis Berne
14:15	Discussion
14:45	Concluding remarks

Poster presentations Session 1	
1	**In-situ and radar observations of snowfall during the Antarctic circumnavigation Expedition (ACE)** Claudio Durán-Alarcón
2	**Models for Hydrometeors Scattering Applied to Forecasts and Observations (MHSAFO): update** Emmanuel Fontaine
3	**Snowfall properties and precipitation phase transitions derived from the MRR-PRO measurements at the King Sejong station, King George Island, northern Antarctic Peninsula** Irina Gorodetskaya
4	**Cancelled - Accuracy of actual Radiative transfer with clouds** Romain Joseph
5	**TBD** Stefan Kneifel
6	**First Observations of a polarmietric W-Band Radar and the VISSS snowfall camera during the 2022/23 winter season in the Rocky Mountains** Anton Kötsche
7	**Best particle size parameters for snow fall speed relationships** Thomas Kuhn
8	**Introducing the Video In Situ Snowfall Sensor (VISSS)** Max Maahn
9	**Characterising Snowflake Particle Size Distributions Using In Situ Observations** Rosie Mammatt
10	**Fit for model evaluation: Polarimetric radar simulations with realistic ice and snow properties** Jana Mendrok

Poster presentations Session 2	
11	**Towards Evaluating Microphysical Pathways Of Midlatitude Snow Formation in the ICON Model** Julian Meusel
12	**Cancelled - Brightness Temperature signature of Shallow Cumuliform Snowfall** Lisa Milani
13	**TBD** Dmitri Moisseev
14	**Cancelled - Simpler scattering solutions to understand the radar polarimetric signatures of snowflakes: a new Tmatrix implementation and the Self-Similar Independent Monomer Approximation** Davide Ori
15	**Do sea ice conditions have a measurable influence on snowfall? A study based on MOSAiC wintertime observations.** Pablo Saavedra Garfias
16	**Stable and Unstable Fall Motions of Plate-like Ice Crystal Analogues** Jen Stout
17	**Relationship between newly fallen snow density and polarimetric parameters obtained from X-band radar observation at Niigata prefecture, Japan** Kazuya Takami
18	**A toolkit for detecting and analyzing peaks in cloud radar Doppler spectra** Teresa Vogl
19	**TBD** Chris Westbrook
20	**Cancelled - Assessing the Effect of Riming on Snow Microphysics: The First Observational Study in East China** Hepeng Zheng
21	**The polarimetric weather radar perspective: Do recent changes in ICON 2-moment microphysics improve the issue of too-much, too-large graupel?** Jana Mendrok