Day	1		Monday, September 9, 2024
		Aula Magna	**Opening Cerimony**
		8:45 9:35	
		9:35 10:05	**Keynote: WMO GUIDE TO OPERATIONAL WEATHER RADAR BEST PRACTICES – FIRST EDITION** **Keynote Speaker: DANIEL MICHELSON** *1) Daniel Michelson, 2) Mark Curtis, 3) Tom Kane, 4) Hiroshi Yamauchi, 5) Thomas Einfalt, 6) Martin Hagen, 7) Michael Istok, 8) Richard Lorandel, 9) Donald Rinderknecht, 10) Benjamin Rohrdantz, 11) Pekka Rossi, 12) Annakaisa von Lerber* 1) Environment and Climate Change Canada , 2) Bureau of Meteorology , 3) Bureau of Meteorology , 4) Japan Meteorological Agency , 5) hydro & meteo GmbH , 6) German Aerospace Center , 7) National Oceanographic and Atmospheric Administration , 8) Meteo France , 9) National Oceanographic and Atmospheric Administration , 10) German Weather Service , 11) World Meteorological Organization , 12) Finnish Meteorological Institute

Session	1	Aula Magna	Radar hydrometeorological applications	
	1	10:05	10:20	**USING RADAR PRECIPITATION FOR IMPACT-BASED SITE-SPECIFIC EARLY WARNINGS** *1) Daniel Sempere-Torres, 2) Erika Meléndez-Landaverde, 3) Marc Berenguer* 1) Centre of Applied Research in Hydrometeorology - Universitat Politècnica de Catalunya - , 2) Centre of Applied Research in Hydrometeorology - Universitat Politècnica de Catalunya - , 3) Centre of Applied Research in Hydrometeorology - Universitat Politècnica de Catalunya -
	2	10:20	10:35	**NOWCASTING EXTREME PRECIPITATION EVENTS: EVALUATING THE EFFECTIVENESS OF GENERATIVE DEEP LEARNING APPROACHES** *1) Gabriele Franch, 2) Elena Tomasi, 3) Rishabh Wanjari, 4) Marco Cristoforetti* 1) Fondazione Bruno Kessler, 2) Fondazione Bruno Kessler, 3) Fondazione Bruno Kessler, 4) Fondazione Bruno Kessler
	3	10:35	10:50	**CELL TRACKING -BASED FRAMEWORK FOR ESTIMATION OF NOWCASTING MODEL SKILL FOR REPRODUCING GROWTH AND DECAY OF CONVECTIVE RAINFALL** *1) Jenna Ritvanen, 2) Seppo Pulkkinen, 3) Dmitri Moisseev, 4) Daniele Nerini* 1) Finnish Meteorological Institute, Helsinki, Finland - Institute for Atmospheric and Earth System Research, Faculty of Science, University of Helsinki, Helsinki, Finland - , 2) Finnish Meteorological Institute, Helsinki, Finland, 3) Institute for Atmospheric and Earth System Research, Faculty of Science, University of Helsinki, Helsinki, Finland - Finnish Meteorological Institute, Helsinki, Finland - , 4) Federal Office of Meteorology and Climatology MeteoSwiss, Locarno-Monti, Switzerland
		10:50	11:20	**Coffee break**
		11:20	11:50	**Keynote:** **Keynote Speaker: V. CHANDRASEKAR** *1) V. Chandrasekar, 2) Renzo Bechini, 3) Sounak Biswas, 4) Rob Cifelli* 1) Colorado State University , 2) Arpa Piemonte - Colorado State University - , 3) Colorado State University , 4) NOAA

Session	2	Aula Magna	Clouds and precipitation physics	
	1	11:50	12:05	**ON THE ESTIMATION OF CONVECTIVE UPDRAFT VELOCITIES USING GOES IR COOLING RATES AND MULTI-DOPPLER RADAR TECHNIQUES: LESSONS LEARNT FROM THE ESCAPE AND TRACER FIELD CAMPAIGNS** *1) Aida Galfione, 2) Alessandro Battaglia, 3) Pavlos Kollias, 4) Mariko Oue* 1) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy, 2) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy, 3) Stony Brook University, Stony Brook NY, USA, 4) Stony Brook University, Stony Brook NY, USA
	2	12:05	12:20	**ARE "IMMENSE" SUPERCELL UPDRAFT CORES A SUFFICIENT CONDITION FOR TORNADOGENESIS?** *1) Michael French, 2) Darrel Kingfield* 1) Stony Brook University, 2) NOAA/Global Systems Laboratory
	3	12:20	12:35	**ELECTRICAL ALIGNMENT SIGNATURES OBSERVED IN AN ISOLATED THUNDERSTORM BY MULTI-PARAMETER DUAL-POLARIZED PHASED ARRAY WEATHER RADAR(MP-PAWR)** *1) shuo wang, 2) Yuuki Wada, 3) Syugo Hayashi, 4) Tomoo Ushio, 5) Venkatachalam Chandrasekar* 1) Osaka university, 2) Osaka university, 3) Japan Meteorological Agency, 4) Osaka university, 5) Colorado State University
	4	12:35	12:50	**NEAR-SURFACE TORNADO THERMODYNAMICS FROM RADAR AND IN SITU OBSERVATIONS** *1) Karen Kosiba, 2) Josh Wurman* 1) Flexible Array of Radars and Mesonets (FARM) - University of Illinois - , 2) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -
	5	12:50	13:05	**OBSERVATION OF FLOW STRUCTURE IN A THUNDERSTORM BY SHIP RADAR** *1) Koji Sassa, 2) Akane Higashikawa* 1) Kochi University, 2) Kochi University

Session	3	Aula Magna	Radar hydrometeorological applications	
	1	14:15	14:30	**ASSESSMENT OF HYDROLOGICAL PERFORMANCE FOR TWO SHORT-TERM RAINFALL FORECASTING APPROACHES AIMED AT FLOOD PREDICTION** *1) Maria Laura Poletti, 2) Martina Lagasio, 3) Francesco Silvestro, 4) Antonio Parodi, 5) Massimo Milelli, 6) Lorenzo Campo, 7) Marco Falzacappa, 8) Stefano Federico* 1) CIMA Research Foundation, 2) CIMA Research Foundation, 3) CIMA Research Foundation, 4) CIMA Research Foundation, 5) CIMA Research Foundation, 6) CIMA Research Foundation, 7) Italian Civil Protection Presidency of the Council of Ministers, 8) ISAC CNR
	2	14:30	14:45	**NOWPRECIP VERSION 2: NEW TECHNIQUES FOR AREAL PRECIPITATION NOWCASTING IN THE COMPLEX TERRAIN OF SWITZERLAND** *1) Ioannis Sideris, 2) Athanasios Ntoumos, 3) Marco Boscacci, 4) Lorenzo Clementi, 5) Urs Germann* 1) MeteoSwiss, 2) MeteoSwiss - Environmental Remote Sensing Laboratory, EPFL, Lausanne, Switzerland - , 3) MeteoSwiss, 4) MeteoSwiss, 5) MeteoSwiss
	3	14:45	15:00	**UTILIZATION OF VERTICAL PROFILE FEATURES FOR PRECIPITATION NOWCASTING** *1) Seppo Pulkkinen, 2) V. Chandrasekar* 1) Finnish Meteorological Institute, 2) Colorado State University
	4	15:00	15:15	**USING STEPS3 TO NOWCAST HIGH-RESOLUTION RAINFALL FIELDS IN UK** *1) Carlos Velasco-Forero, 2) Jayaram Pudashine, 3) Katie Norman, 4) Matthew Clark, 5) Mark Curtis* 1) Australian Bureau of Meteorology, Research, Radar Science, 2) Australian Bureau of Meteorology, Research, Radar Science, 3) UK MetOffice, Nowcasting Science, 4) UK MetOffice, Nowcasting Science, 5) Australian Bureau of Meteorology, Research, Radar Science
	5	15:15	15:30	**COMBINING TITAN AND LSTM SCHEMES TO DEVELOP A NEW RADAR NOWCASTING TOOL TO PREDICT FLASH FLOODS** *1) Andrea Viteri, 2) Carlos Morales* 1) University of Sao Paulo, 2) University of Sao Paulo
	6	15:30	15:45	**HYDROLOGICAL MODELING OF PROBABILISTIC RAINFALL FORECASTS FOR IMPACT-BASED FLOOD WARNING SYSTEM** *1) Daniel Eduardo Villarreal-Jaime, 2) Patrick Willems, 3) Lesley De Cruz, 4) Ricardo Reinoso-Rondinel* 1) Hydraulic and Geotechnics Unit, KU Leuven, Belgium - Royal Meteorological Institute of Belgium, Belgium - , 2) Hydraulic and Geotechnics Unit, KU Leuven, Belgium, 3) Royal Meteorological Institute of Belgium, Belgium - Electronics and Informatics Department, Vrije Universiteit Brussel, Belgium - , 4) Hydraulic and Geotechnics Unit, KU Leuven, Belgium - Royal Meteorological Institute of Belgium, Belgium -
	7	15:45	16:00	**UNLEASHING THE POTENTIAL OF CONVOLUTIONAL AND RECURRENT NEURAL NETWORKS AS A POWERFUL TOOL FOR RADAR ECHOES EXTRAPOLATION** *1) Avijit Majhi, 2) Stefano Farris, 3) Alessandro Seoni, 4) Muhammad Shafeeq Ul Rehman Khan, 5) Maria Grazia Badas, 6) Marino Marrocu, 7) Francesco Viola, 8) Roberto Deidda* 1) Università degli Studi di Cagliari, Department of Civil- Environmental Engineering and Architecture, Cagliari, Italy, 2) Università degli Studi di Cagliari, Department of Civil- Environmental Engineering and Architecture, Cagliari, Italy, 3) Università degli Studi di Cagliari, Department of Civil- Environmental Engineering and Architecture, Cagliari, Italy, 4) Università degli Studi di Cagliari, Department of Civil- Environmental Engineering and Architecture, Cagliari, Italy, 5) Università degli Studi di Cagliari, Department of Civil- Environmental Engineering and Architecture, Cagliari, Italy, 6) CRS4, Center for Advanced Studies, Research and Development in Sardinia, Pula, Italy, 7) Università degli Studi di Cagliari, Department of Civil- Environmental Engineering and Architecture, Cagliari, Italy, 8) Università degli Studi di Cagliari, Department of Civil- Environmental Engineering and Architecture, Cagliari, Italy
	8	16:00	16:15	**LEVERAGING DEEP LEARNING FOR SEAMLESS RAINFALL AND FLOOD PREDICTION IN BELGIUM** *1) Simon De Kock, 2) Lesley De Cruz, 3) Michiel Van Ginderachter, 4) Arthur Moraux* 1) Electronics and Informatics (ETRO), Vrije Universiteit Brussel, Brussels, Belgium, 2) Royal Meteorological Institute, Brussels, Belgium - Electronics and Informatics (ETRO), Vrije Universiteit Brussel, Brussels, Belgium - , 3) Royal Meteorological Institute, Brussels, Belgium, 4) Royal Meteorological Institute, Brussels, Belgium - Electronics and Informatics (ETRO), Vrije Universiteit Brussel, Brussels, Belgium -

Session	4	Aula Archeologia		Clouds and precipitation physics
	1	14:15	14:30	**CLOUD RADAR DEPOLARIZATION SIGNATURES OF SNOWFLAKES**
				1) Dmitri Moisseev, 2) Maximilian Maahn, 3) Annakaisa von Lerber
				1) Institute for Atmospheric and Earth System Research, Faculty of Science, University of Helsinki, Finland - Finnish Meteorological Institute, Helsinki, Finland - , 2) Leipzig Institute for Meteorology, Leipzig University, Leipzig, Germany - Finnish Meteorological Institute, Helsinki, Finland - , 3) Finnish Meteorological Institute, Helsinki, Finland
	2	14:30	14:45	**ESTIMATING AGGREGATION EFFICIENCIES USING POLARIMETRIC RADARS**
				1) Edwin Dunnavan, 2) Alexander Ryzhkov, 3) Jiaxi Hu
				1) Cooperative Insitute for Severe and High-Impact Weather Research and Operations, Norman, OK, USA - National Severe Storms Laboratory, Norman, OK, USA - The University of Oklahoma, Norman, OK, USA, 2) Cooperative Insitute for Severe and High-Impact Weather Research and Operations, Norman, OK, USA - National Severe Storms Laboratory, Norman, OK, USA - The University of Oklahoma, Norman, OK, USA, 3) Cooperative Insitute for Severe and High-Impact Weather Research and Operations, Norman, OK, USA - National Severe Storms Laboratory, Norman, OK, USA - The University of Oklahoma, Norman, OK, USA
	3	14:45	15:00	**PEERING INTO THE HEART OF THUNDERSTORM CLOUDS: INSIGHTS FROM CLOUD RADAR AND SPECTRAL POLARIMETRY**
				1) Ho Yi Lydia Mak, 2) Christine Unal
				1) Delft University of Technology - Faculty CEG, 2) Delft University of Technology - Faculty CEG - Delft University of Technology - Climate Institute -
	4	15:00	15:15	**INVESTIGATING ICE MICROPHYSICAL PROCESSES IN THE DENDRITIC GROWTH LAYER BY COMBINING POLARIMETRIC CLOUD RADAR OBSERVATIONS WITH MONTE-CARLO PARTICLE MODELING**
				1) Leonie von Terzi, 2) Christoph Siewert, 3) Axel Seifert, 4) Stefan Kneifel
				1) Meteorological Institute, Ludwig-Maximillians University Munich, 2) Deutscher Wetterdienst, 3) Deutscher Wetterdienst, 4) Meteorological Institute, Ludwig-Maximillians University Munich
	5	15:15	15:30	**POSITIVE AND NEGATIVE SCATTERING DIFFERENTIAL PHASE: OBSERVATIONS AND UTILIZATION IN MICROPHYSICAL RETRIEVALS.**
				1) Valery Melnikov, 2) Dusan Zrnic, 3) Arthur Witt
				1) Oklahoma University - National Severe Storms Laboratory - , 2) National Severe Storms Laboratory, 3) National Severe Storms Laboratory
	6	15:30	15:45	**A NEW ALGORITHM FOR DISCRIMINATING AGGREGATION AND RIMING BASED ON POLARIMETRIC WEATHER RADARS**
				1) Armin Blanke, 2) Mathias Gergely, 3) Silke Trömel
				1) Institute of Geosciences, Department of Meteorology, University of Bonn, Bonn, 53121, Germany, 2) German Meteorological Service (Deutscher Wetterdienst, DWD), Observatorium Hohenpeißenberg, Hohenpeißenberg, 82383, Germany, 3) Institute of Geosciences, Department of Meteorology, University of Bonn, Bonn, 53121, Germany - Laboratory for Clouds and Precipitation Exploration, Geoverbund ABC/J, Bonn, 53121, Germany -
	7	15:45	16:00	**INVESTIGATING THE ORIGIN OF W-BAND RADAR KDP SIGNATURES INSIDE AND BELOW THE DENDRITIC GROWTH LAYER**
				1) Anton Kötsche, 2) Alexander Myagkov, 3) Maximilian Maahn, 4) Veronika Ettrichrätz, 5) Alexander Ryzhkov, 6) Petar Bukovcic, 7) Leonie von Terzie, 8) Stefan Kneifel, 9) Heike Kalesse-Los
				1) Leipzig Institute for Meteorology, University of Leipzig, Germany, 2) RPG Radiometer Physics GmbH, Germany , 3) Leipzig Institute for Meteorology, University of Leipzig, Germany, 4) Leipzig Institute for Meteorology, University of Leipzig, Germany, 5) NSSL, Norman, OK, USA, 6) NSSL, Norman, OK, USA, 7) Meteorological Institute, Ludwig-Maximilians-Universität in Munich, Munich, Germany, 8) Meteorological Institute, Ludwig-Maximilians-Universität in Munich, Munich, Germany, 9) Leipzig Institute for Meteorology, University of Leipzig, Germany
	8	16:00	16:15	**INVESTIGATION OF THE DUAL-POLARIZATION RADAR BRIGHT BAND SIGNATURES USING MELTING MODEL PROFILE IN NORTHERN TAIWAN**
				1) Jui Le Loh, 2) Wei Yu Chang, 3) Bo An Tsai, 4) Yu Chieng Liou, 5) Pao Liang Chang, 6) Pin Fang Lin
				1) Department of Atmospheric Sciences, National Central University, Taiwan, 2) Department of Atmospheric Sciences, National Central University, Taiwan, 3) Department of Atmospheric Sciences, National Central University, Taiwan, 4) Department of Atmospheric Sciences, National Central University, Taiwan, 5) Central Weather Bureau, Taipei, Taiwan, 6) Central Weather Bureau, Taipei, Taiwan
Session	**5**	**Aula Magna**		**Radar hydrometeorological applications**
	1	16:45	17:00	**EXTREME EVENT EVALUATION OF RADAR-DERIVED POLARIMETRIC PRECIPITATION ESTIMATES USING A DENSE NETWORK OF RAIN GAUGES**
				1) Bong-Chul Seo, 2) Witold Krajewski
				1) Missouri University of Science and Technolgy, 2) University of Iowa
	2	17:00	17:15	**CONVECTIVE RAINFALL INTENSIFICATION AND CHANGING SPATIAL PATTERNS IN URBAN AREAS**
				1) Herminia Torelló-Sentelles, 2) Francesco Marra, 3) Marika Koukoula, 4) Gabriele Villarini, 5) Nadav Peleg
				1) Institute of Earth Surface Dynamics, University of Lausanne, Lausanne, Switzerland, 2) Department of Geosciences, University of Padova, Padova, Italy, 3) Institute of Earth Surface Dynamics, University of Lausanne, Lausanne, Switzerland, 4) Department of Civil and Environmental Engineering, Princeton University, Princeton, USA - High Meadows Environmental Institute, Princeton University, Princeton, USA - , 5) Institute of Earth Surface Dynamics, University of Lausanne, Lausanne, Switzerland
	3	17:15	17:30	**EXPLORING THE USE OF LIGHTNING CHARACTERISTICS TO IMPROVE THE RADAR-BASED DETECTION OF HAILSTORM SEVERITY**
				1) Federico Vermi, 2) Vincenzo Capozzi, 3) Giulio Monte, 4) Giorgio Budillon, 5) Sante Laviola
				1) Department of Science and Technology, University of Naples "Parthenope", Centro Direzionale di Napoli, Isola C4, 80143, Italy - National Research Council, Institute of Atmospheric Science and Climate, via Gobetti 101, 40129 Bologna, Italy - , 2) Department of Science and Technology, University of Naples "Parthenope", Centro Direzionale di Napoli, Isola C4, 80143, Italy, 3) National Research Council, Institute of Atmospheric Science and Climate, via Gobetti 101, 40129 Bologna, Italy, 4) Department of Science and Technology, University of Naples "Parthenope", Centro Direzionale di Napoli, Isola C4, 80143, Italy, 5) National Research Council, Institute of Atmospheric Science and Climate, via Gobetti 101, 40129 Bologna, Italy
	4	17:30	17:45	**DETECTION OF HAIL WITH A MACHINE LEARNING ALGORITHMS BASED ON WEATHER RADAR DATA**
				1) Agnieszka Kurcz, 2) Anna Jurczyk, 3) Jan Szturc
				1) Institute of Meteorology and Water Management - National Research Institute, 2) Institute of Meteorology and Water Management - National Research Institute, 3) Institute of Meteorology and Water Management - National Research Institute
	5	17:45	18:00	**UNCERTAINTY ESTIMATION FOR CONVECTIVE CELL NOWCASTING: A KALMAN-FILTER IMPLEMENTATION OF ENHANCED TITAN**
				1) Li-Pen Wang, 2) Andrew McNaughton, 3) Yuting Chen, 4) Robert Scovell, 5) Duncan Wright, 6) Carlos Munoz Lopez, 7) Christian Onof, 8) Claire Bartholemew, 9) Katie Norman, 10) Susana Ochoa-Rodriguez
				1) National Taiwan University, Taiwan - RainPlusPlus Ltd., UK - , 2) Met Office, UK, 3) Imperial College London, UK, 4) Met Office, UK, 5) Met Office, UK, 6) Ku Leuven, Belgium, 7) Imperial College London, UK, 8) Met Office, UK, 9) Met Office, UK, 10) RainPlusPlus Ltd., UK
	6	18:00	18:15	**ENHANCING FLOOD PREDICTION USING X-BAND POLARIMETRIC RADAR DATA: TWO CASE STUDIES IN THE MARCHE REGION, ITALY**
				1) Francesco Iocca, 2) Annalina Lombardi, 3) Francesca Sini, 4) Gabriella Speranza, 5) Valentino Giordano, 6) Saverio Di Fabio, 7) Lorenzo Giorgio Didimi, 8) Marco Lazzeri, 9) Marco Tedeschini, 10) Marco Pellegrini, 11) Barbara Tomassetti
				1) Functional Centre, Marche Region Civil Protection Service, 60126 Ancona, Italy, 2) Department of Physical and Chemical Sciences (DSFC) University of L'Aquila - Center of Excellence Telesensing of Environment and Model Prediction of Severe Events (CETEMPS), 67100 L'Aquila, Italy - , 3) Functional Centre, Marche Region Civil Protection Service, 60126 Ancona, Italy, 4) Functional Centre, Marche Region Civil Protection Service, 60126 Ancona, Italy, 5) Functional Centre, Marche Region Civil Protection Service, 60126 Ancona, Italy, 6) Center of Excellence Telesensing of Environment and Model Prediction of Severe Events (CETEMPS), 67100 L'Aquila, Italy, 7) Functional Centre, Marche Region Civil Protection Service, 60126 Ancona, Italy, 8) Functional Centre, Marche Region Civil Protection Service, 60126 Ancona, Italy, 9) Functional Centre, Marche Region Civil Protection Service, 60126 Ancona, Italy, 10) Functional Centre, Marche Region Civil Protection Service, 60126 Ancona, Italy - Department of Life and Environmental Sciences (DISVA), Università Politecnica delle Marche, 60131 Ancona, Italy - LIF Srl, 50018 Scandicci (Firenze), Italy, 11) Center of Excellence Telesensing of Environment and Model Prediction of Severe Events (CETEMPS), 67100 L'Aquila, Italy
Session	**6**	**Aula Archeologia**		**Clouds and precipitation physics**
	1	16:45	17:00	**ANALYSIS OF RADAR DOPPLER SPECTRA OBSERVED BY AN AIRBORNE CLOUD RADAR**
				1) Ulrike Romatschke
				1) NSF National Center for Atmospheric Research
	2	17:00	17:15	**VERTICAL WIND AND DROP SIZE DISTRIBUTION RETRIEVAL WITH A G-BAND DOPPLER RADAR**
				1) Nitika Yurk, 2) Matthew Lebsock, 3) Juan Socuellamos, 4) Raquel Monje, 5) Ken Cooper
				1) Jet Propulsion Laboratory, 2) Jet Propulsion Laboratory, 3) Jet Propulsion Laboratory, 4) Jet Propulsion Laboratory, 5) Jet Propulsion Laboratory
	3	17:15	17:30	**ADVANCED CLOUD DETECTION AND VELOCITY UNFOLDING TECHNIQUES FOR 94-GHZ CLOUD RADAR**
				1) Shaik Allabakash, 2) Hajime Okamoto, 3) Kaori Sato, 4) Hiroaki Horie, 5) Ohno Yuichi, 6) Iwai Hironori, 7) Masayuki Yamamoto
				1) Research Institute for Applied Mechanics, Kyushu University, Fukuoka, Japan, 2) Research Institute for Applied Mechanics, Kyushu University, Fukuoka, Japan, 3) Research Institute for Applied Mechanics, Kyushu University, Fukuoka, Japan, 4) National Institute of Information and Communications Technology (NICT), Japan, 5) National Institute of Information and Communications Technology (NICT), Japan, 6) National Institute of Information and Communications Technology (NICT), Japan, 7) National Institute of Information and Communications Technology (NICT), Japan

4	17:30	17:45	**GENERATING A MULTI-DOPPLER RADAR 3D WIND COMPOSITE FOR THE WESCON-WOEST CAMPAIGN IN SOUTHERN ENGLAND** *1) Robert Thompson, 2) Thorwald Stein, 3) Ryan Neely III, 4) Lindsay Bennett* 1) University of Reading, 2) University of Reading, 3) National Centre for Atmospheric Science - University of Leeds - , 4) National Centre for Atmospheric Science - University of Leeds -
5	17:45	18:00	**UNDERSTANDING THE MORPHOLOGY OF CLOUDS AS OBSERVED BY C-BAND DOPPLER WEATHER RADAR FOR A SEVERE DUST STORM EVENT OVER NEW DELHI – THE URBAN-MEGACITY OF INDIA** *1) Kaustav Chakravarty, 2) Ramesh Vellore, 3) Govindan Pandithurai* 1) Indian Institute of Tropical Meteorology, Ministry of Earth Sciences, Pune, India, 2) Indian Institute of Tropical Meteorology, Ministry of Earth Sciences, Pune, India, 3) Indian Institute of Tropical Meteorology, Ministry of Earth Sciences, Pune, India
6	18:00	18:15	**CONVECTION IN THE VICINITY OF THE BLACK FOREST** *1) Melissa Latt, 2) Philipp Gasch, 3) Jan Handwerker* 1) Karlsruhe Institute of Technology (KIT), Institute of Meteorology and Climate Research (IMKTRO), Karlsruhe, Germany, 2) Karlsruhe Institute of Technology (KIT), Institute of Meteorology and Climate Research (IMKTRO), Karlsruhe, Germany, 3) Karlsruhe Institute of Technology (KIT), Institute of Meteorology and Climate Research (IMKTRO), Karlsruhe, Germany

Day	2		Tuesday, September 10, 2024

| | | **Aula Magna**
8:45   9:15 | **Keynote: POLARIMETRIC RADAR OBSERVATIONS MEET ATMOSPHERIC MODELLING (PROM) - A RESEARCH INITIATIVE IN GERMANY**

Keynote Speaker: SILKE TRÖMEL
1) Silke Trömel, 2) and the PROM Team
1) Institute for Geosciences, Department of Meteorology, University of Bonn, Germany - Laboratory for Clouds and Precipitation Exploration, Geoverbund ABC/J, Bonn, Germany - , 2) Institute for Geosciences, Department of Meteorology, University of Bonn, Germany |

Session	1	Aula Magna	**Radar and society**
	1	9:20 9:35	**WILDFIRES OBSERVED BY SURVEILLANCE WEATHER RADARS AT 3, 5 AND 10 CM WAVELENGTHS** *1) Dusan Zrnic, 2) Djordje Mirkovic, 3) David Schvartrzman, 4) Pegfei Zhang, 5) Valery Melnikov, 6) Emma Miller* 1) DOC NOAA/National Severe Storms Laboratory (NSSL) - Advanced Radar Research Center - Depatrments of Meteorology and Electrical Engineering, University of Oklahoma, Norman OK USA, 2) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma - NOAA/NSSL - , 3) Scool of Meteorology, University of Oklahoma - Advanced Radar Research Cetner - , 4) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman OK, USA - NOAA/NSSL - , 5) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman OK, USA - NOAA/NSSL - , 6) Scool of Meteorology, University of Oklahoma
	2	9:35 9:50	**ENHANCING WILDFIRE HAZARD INTELLIGENCE FOR EMERGENCY MANAGEMENT THROUGH OPERATIONAL AND PORTABLE WEATHER RADAR OBSERVATIONS** *1) Adrien Guyot, 2) Hamish McGowan, 3) Joshua Soderholm, 4) Jordan Brook, 5) Kathryn Turner, 6) Nick McCarthy, 7) Alain Protat* 1) The University of Queensland, Australia - Australian Bureau of Meteorology - , 2) The University of Queensland, Australia, 3) Australian Bureau of Meteorology, 4) Australian Bureau of Meteorology, 5) The University of Queensland, Australia, 6) Country Fire Authority, Australia, 7) Australian Bureau of Meteorology
	3	9:50 10:05	**USING DUAL POLARISATION WEATHER SURVEILLANCE RADAR TO DETERMINE TEMPORAL AND SPATIAL PATTERNS OF THE FLYING ANT EMERGENCE IN THE UK** *1) Freya Addison, 2) Ryan Neely III, 3) Elizabeth Duncan, 4) Thomas Dally, 5) Maryna Lukach, 6) Mansi Mungee* 1) University of Leeds - Universität Leipzig - National Environment Research Council, 2) University of Leeds - National Centre for Atmospheric Science - , 3) University of Leeds, 4) University of Leeds, 5) University of Leeds - National Centre for Atmospheric Science - , 6) University of LeedsNational Environment Research Council
	4	10:05 10:20	**OBSERVATION AND SIMULATION OF ECHOES FROM FLYING ORGANISMS USING METEOROLOGICAL RADARS** *1) Thibault Désert, 2) Valery Melnikov, 3) Vincent Delcourt , 4) Baptiste Schmid , 5) Ludovic Bouilloud, 6) Camille Assali, 7) Cecile Bon, 8) Amédée Roy* 1) Météo-France, 2) University of Oklahoma, 3) Biotope, 4) Swiss Ornithological Institute, 5) Météo-France, 6) Biotope, 7) France Energies Marines, 8) France Energies Marines
	5	10:20 10:35	**MONITORING FLYING INSECTS WITH DOPPLER CLOUD RADAR** *1) Moritz Lochmann, 2) Heike Kalesse-Los, 3) Teresa Vogl, 4) Willi Schimmel, 5) Roel van Klink, 6) Christian Wirth* 1) Leipzig Institute for Meteorology, University Leipzig, 2) Leipzig Institute for Meteorology, University Leipzig, 3) Leipzig Institute for Meteorology, University Leipzig, 4) Leibniz Institute for Tropospheric Research Leipzig, 5) Leibniz Institute for Tropospheric Research Leipzig - German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig - , 6) Systematic Botany and Functional Biodiversity / Botanical Garden, Institute of Biology, University Leipzig - German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig -
	6	10:35 10:50	**YOUR NOISE, OUR DATA: CURRENT AND FUTURE OPPORTUNITIES OF WEATHER RADAR FOR AEROECOLOGY** *1) Bart Kranstauber, 2) Bart Hoekstra, 3) Silke Bauer, 4) Adriaan M Dokter, 5) Peter Desmet, 6) Hans van Gasteren, 7) Birgen Haest, 8) Hidde Leijnse, 9) Cecilia Nilsson, 10) Baptiste Schmid, 11) Nadja Weisshaupt, 12) Judy Z Shamoun-Baranes* 1) Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, The Netherlands, 2) Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, The Netherlands, 3) Federal Research Institute for Forest, Snow and Landscape (WSL), Birmensdorf, Switzerland, 4) Cornell Lab of Ornithology, Cornell University, Ithaca, NY, 5) Research Institute for Nature and Forest (INBO), Brussels, Belgium, 6) Royal Netherlands Air Force, Breda, the Netherlands, 7) Swiss Ornithological Institute, Sempach, Switzerland, 8) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute (KNMI), De Bilt, The Netherlands, 9) Lund University, Lund, Sweden, 10) Swiss Ornithological Institute, Sempach, Switzerland, 11) Finnish Meteorological Institute, Helsinki, Finland, 12) Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam, Amsterdam, The Netherlands

Session	2	Aula Archeologia	**Weather radar technologies**
	1	9:20 9:35	**PHASED ARRAY OR PARABOLA?** *1) Tomoo Ushio, 2) Yuuki Wada, 3) Hiroshi Kikuchi, 4) Eiichi Yoshikawa* 1) Osaka University, 2) Osaka University, 3) The University of Electro-Communications, 4) Colorado State University - JAXA -
	2	9:35 9:50	**NOVEL POLARIMETRIC WEATHER OBSERVATIONS ENABLED BY THE FULLY DIGITAL HORUS PHASED ARRAY RADAR** *1) David Schvartzman, 2) Robert Palmer* 1) University of Oklahoma - Advanced Radar Research Center and School of Meteorology - , 2) University of Oklahoma - Advanced Radar Research Center and School of Meteorology -
	3	9:50 10:05	**THE POTENTIAL OF THE POLARIMETRIC ATMOSPHERIC IMAGING RADAR (PAIR) FOR UNPRECEDENTED INSIGHTS ABOUT STORM EVOLUTION** *1) Tian-You Yu, 2) David Schvartzman, 3) Jorge Salazar Cerreno, 4) Caleb Fulton, 5) Robert Palmer, 6) Mark Yeary, 7) Howard Bluestein* 1) Advanced Radar Research Center, University of Oklahoma - School of Electrical and Computer Engineering, University of Oklahoma - School of Meteorology, University of Oklahoma, 2) Advanced Radar Research Center, University of Oklahoma - School of Meteorology, University of Oklahoma - School of Electrical and Computer Engineering, University of Oklahoma, 3) Advanced Radar Research Center, University of Oklahoma - School of Electrical and Computer Engineering, University of Oklahoma - , 4) Advanced Radar Research Center, University of Oklahoma - School of Electrical and Computer Engineering, University of Oklahoma - , 5) Advanced Radar Research Center, University of Oklahoma - School of Meteorology, University of Oklahoma - , 6) Advanced Radar Research Center, University of Oklahoma - School of Electrical and Computer Engineering, University of Oklahoma - , 7) School of Meteorology, University of Oklahoma
	4	10:05 10:20	**DUAL-POLARIZATION ANALYSIS CONCEPTS FOR APAR SIMULATION OF AIRBORNE PHASED ARRAY RADAR (APAR) ARCHITECTURE** *1) Eiichi Yoshikawa, 2) V. Chandrasekar* 1) Colorado State University, 2) Colorado State University
	5	10:20 10:35	**THE NATIONAL SEVERE STORMS LABORATORY (NSSL) PHASED ARRAY WEATHER RADAR RESEARCH AND DEVELOPMENT PROGRAM: SUCCESSES AND OPPORTUNITIES** *1) Rafael Mendoza, 2) Anthony Reinhart, 3) Daniel Wasielewski, 4) Sebastian Torres, 5) Addison Alford, 6) Terry Schuur, 7) Larry Hopper* 1) NOAA/OAR/NSSL, 2) NOAA/OAR/NSSL, 3) NOAA/OAR/NSSL, 4) OU/CIWRO - NOAA/OAR/NSSL - , 5) NOAA/OAR/NSSL, 6) OU/CIWRO - NOAA/OAR/NSSL - , 7) NOAA/OAR/NSSL
	6	10:35 10:50	**CRMN - RADAR IMAGE SUPER RESOLUTION USING A CONVOLUTIONAL RECURRENT MIXER NETWORK** *1) Daniel Felipe da Silva Santos, 2) Rafael Gonçalves Pires, 3) Jaqueline Murakami Kokitsu, 4) João Paulo Papa, 5) Roberto Vicente Calheiros* 1) Computing Department, Faculty of Science, Unesp, 2) Computing Department, Faculty of Science, Unesp, 3) IT Technical Directorate, Faculty of Science, Unesp, 4) Computing Department, Faculty of Science, Unesp, 5) Meteorological Research Institute/Unesp, retired since 2011

Session	3	Aula Magna	**Radar hydrometeorological applications**
	1	14:15 14:30	**CURRENT STATUS OF SINFONY – THE COMBINATION OF NOWCASTING AND NUMERICAL WEATHER PREDICTION FOR FORECASTING CONVECTIVE EVENTS AT DWD** *1) Ulrich Blahak, 2) Team SINFONY* 1) Deutscher Wetterdienst, 2) Deutscher Wetterdienst
	2	14:30 14:45	**ASSIMILATION OF RADAR DATA IN ICON AT VERY HIGH RESOLUTION - THE GLORI PROJECT** *1) Virginia Poli, 2) Xu Xu, 3) Claire Merker, 4) Klaus Stephan, 5) Thomas Gastaldo, 6) Arianna Valmassoi, 7) Alina Yapparova, 8) Pier Paolo Alberoni, 9) Chiara Marsigli* 1) Arpae Emilia-Romagna, Italy - ItaliaMeteo Agency, Italy - , 2) Deutscher Wetterdienst, Germany, 3) MeteoSwiss, Switzerland, 4) Deutscher Wetterdienst, Germany, 5) Arpae Emilia-Romagna, Italy - ItaliaMeteo Agency, Italy - , 6) Deutscher Wetterdienst, Germany, 7) MeteoSwiss, Switzerland, 8) Arpae Emilia-Romagna, Italy, 9) Deutscher Wetterdienst, Germany - Arpae Emilia-Romagna, Italy - ItaliaMeteo Agency, Italy
	3	14:45 15:00	**THE AROME-MESONH RADAR DUAL-POLARIZATION FORWARD OPERATOR: RECENT PROGRESS AND OUTLOOK** *1) Clotilde Augros, 2) Cloé David* 1) CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France, 2) CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France
	4	15:00 15:15	**ASSIMILATION OF RADAR REFLECTIVITIES AND WINDS FROM OPERA NIMBUS IN HARMONIE-AROME** *1) Günther Haase, 2) Jana Sánchez Arriola, 3) Martin Ridal, 4) Mats Dahlbom, 5) Magnus Lindskog* 1) Swedish Meteorological and Hydrological Institute, Norrköping, Sweden, 2) Agencia Estatal de Meteorologia, Santander, Spain, 3) Swedish Meteorological and Hydrological Institute, Norrköping, Sweden, 4) Danish Meteorological Institute, Copenhagen, Denmark, 5) Swedish Meteorological and Hydrological Institute, Norrköping, Sweden

5	15:15	15:30	**ASSIMILATING 3D RADAR REFLECTIVITY OBSERVATIONS IN COMPLEX TOPOGRAPHY** *1) Alina Yapparova, 2) Claire Merker, 3) Daniel Leuenberger, 4) Marco Boscacci, 5) Urs Germann, 6) David Leutwyler* 1) MeteoSwiss, 2) MeteoSwiss, 3) MeteoSwiss, 4) MeteoSwiss, 5) MeteoSwiss, 6) MeteoSwiss
6	15:30	15:45	**IMPACT OF ASSIMILATING RADAR REFRACTIVITY WITH RADIAL WIND AND REFLECTIVITY IN THE CONTEXT OF ENSEMBLE KALMAN FILTER** *1) kao-shen chung, 2) Nghi Phuong Do, 3) Pay-Liam Lin, 4) Bo-An Tsai, 5) Ya-Chien Feng* 1) National Central University, 2) Scripps Institution of Oceanography University of California, 3) National Central University, 4) National Central University, 5) Pacific Northwest National Laboratory
7	15:45	16:00	**IMPACT OF ASSIMILATING C-BAND PHASED-ARRAY RADAR DATA WITH ENKF ON THE FORECAST OF CONVECTION INITIATION: A CASE STUDY IN BEIJING, CHINA** *1) Yinghui Lu, 2) Jie Ming, 3) Peng Gong, 4) Kun Zhao, 5) Hao Huang* 1) Nanjing University, 2) Nanjing University, 3) Nanjing University, 4) Nanjing University, 5) Nanjing University
8	16:00	16:15	**COMBIPRECIP ENSEMBLE: GENERATION OF MULTI-MEMBER REALIZATIONS FROM A KRIGING-BASED RADAR-RAINGAUGE COMBINATION APPLICATION IN SWITZERLAND** *1) Athanasios Ntoumos, 2) Ioannis Sideris, 3) Marco Gabella, 4) Alexis Berne, 5) Urs Germann* 1) Environmental Remote Sensing Laboratory, EPFL, Lausanne, Switzerland - MeteoSwiss, Locarno, Switzerland - , 2) MeteoSwiss, Locarno, Switzerland, 3) MeteoSwiss, Locarno, Switzerland, 4) Environmental Remote Sensing Laboratory, EPFL, Lausanne, Switzerland, 5) MeteoSwiss, Locarno, Switzerland

Session	4	Aula Archeologia	Weather radar technologies
	1	14:15 14:30	**CLOUDCUBE: ADVANCING ATMOSPHERIC PROFILING WITH MULTIFREQUENCY MM-WAVE RADAR** *1) Raquel Rodriguez Monje, 2) Ken Cooper, 3) Matthew Lebsock, 4) Juan Socuellamos, 5) Robert Beauchamp, 6) Simone Tanelli* 1) Jet Propulsion Laboratory, California Institute of Technology, 2) Jet Propulsion Laboratory, California Institute of Technology, 3) Jet Propulsion Laboratory, California Institute of Technology, 4) Jet Propulsion Laboratory, California Institute of Technology, 5) Jet Propulsion Laboratory, California Institute of Technology, 6) Jet Propulsion Laboratory, California Institute of Technology
	2	14:30 14:45	**DIFFERENTIAL ABSORPTION G-BAND RADAR FOR ARCTIC CLOUDS AND WATER VAPOR OBSERVATIONS** *1) Mario Mech, 2) Sabrina Schnitt, 3) Jens Goliasch, 4) Thomas Rose, 5) Linnea Bühler, 6) Susanne Crewell* 1) University of Cologne, 2) University of Cologne, 3) Radiometer Physics GmbH, 4) Radiometer Physics GmbH, 5) University of Cologne, 6) University of Cologne
	3	14:45 15:00	**POSTPROCESSING METHODS TO CHARACTERIZE MULTIMODAL PRECIPITATION IN DOPPLER SPECTRA FROM DWD'S C-BAND RADAR BIRDBATH SCAN** *1) Mathias Gergely, 2) Paul Ockenfuß, 3) Maximilian Schaper, 4) Stefan Kneifel, 5) Michael Frech* 1) German Meteorological Service (Deutscher Wetterdienst, DWD), Observatorium Hohenpeißenberg, 2) Meteorological Institute, Ludwig-Maximilians University, Munich, 3) German Meteorological Service (Deutscher Wetterdienst, DWD), Observatorium Hohenpeißenberg, 4) Meteorological Institute, Ludwig-Maximilians University, Munich, 5) German Meteorological Service (Deutscher Wetterdienst, DWD), Observatorium Hohenpeißenberg
	4	15:00 15:15	**APPLICATION OF THE REGRESSION FILTER TO SZ PHASE CODING FOR UNAMBIGUOUS VELOCITY EXTENSION** *1) John Hubbert, 2) Ulrike Romatschke, 3) Scott Ellis* 1) NCAR, 2) NCAR, 3) NCAR
	5	15:15 15:30	**A PHYSICS-INFORMED MACHINE-LEARNING ALGORITHM TO RECOVER CORRUPTED OR BLANKED DATA IN WEATHER RADAR VELOCITY MEASUREMENTS** *1) Christian Schiefer, 2) Sebastian Kauczok, 3) Albert Töws, 4) Andre Weipert, 5) Frank Gekat* 1) Leonardo Germany GmbH, 2) Leonardo Germany GmbH, 3) Leonardo Germany GmbH, 4) Leonardo Germany GmbH, 5) Leonardo Germany GmbH
	6	15:30 15:45	**VERIFICATION OF THE CROSS-POLARIZATION CHARACTERISTICS OF POLARIMETRIC WEATHER RADAR ANTENNAS USING THE SUN AS A SOURCE** *1) Roberto Costantini* 1) INVAP S.E.
	7	15:45 16:00	**SOLID-STATE OR MAGNETRON? A FIRST LOOK AT DATA FROM THE DUAL TRANSMITTER RADAR AT DWD** *1) Maximilian Schaper, 2) Michael Frech, 3) Cornelius Hald, 4) Benjamin Rohrdantz, 5) Bertram Lange* 1) German Meteorological Service (DWD), 2) German Meteorological Service (DWD), 3) German Meteorological Service (DWD), 4) German Meteorological Service (DWD), 5) German Meteorological Service (DWD)
	8	16:00 16:15	**DETECTION OF WIND TURBINE CONTAMINATION USING SPECTRAL DUAL POLARISATION AND A CONVOLUTION NEURAL NETWORK** *1) Nawal Husnoo, 2) Timothy Darlington, 3) Sebastiàn Torres, 4) David Warde* 1) Met Office, 2) Met Office, 3) Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO), The University of Oklahoma - NOAA/OAR National Severe Storms Laboratory - , 4) Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO), The University of Oklahoma - NOAA/OAR National Severe Storms Laboratory -

Session	5	Aula Magna	Clouds and precipitation physics
	1	16:45 17:00	**DOUBLE MOMENT NORMALIZATION OF HAIL SIZE NUMBER DISTRIBUTIONS OVER SWITZERLAND** *1) Alfonso Ferrone, 2) Jérôme Kopp, 3) Martin Lainer, 4) Marco Gabella, 5) Urs Germann, 6) Alexis Berne* 1) Environmental Remote Sensing Laboratory, EPFL, Lausanne, Switzerland - Federal Office of Meteorology and Climatology MeteoSwiss, Locarno-Monti, Switzerland - Hydro-Meteo-Climate Structure, Regional Agency for Prevention, Environment and Energy of Emilia-Romagna, Bologna, Italy, 2) Oeschger Centre for Climate Change Research and Institute of Geography, University of Bern, Bern, Switzerland, 3) Federal Office of Meteorology and Climatology MeteoSwiss, Locarno-Monti, Switzerland, 4) Federal Office of Meteorology and Climatology MeteoSwiss, Locarno-Monti, Switzerland, 5) Federal Office of Meteorology and Climatology MeteoSwiss, Locarno-Monti, Switzerland, 6) Environmental Remote Sensing Laboratory, EPFL, Lausanne, Switzerland
	2	17:00 17:15	**RADAR-FOCUSED HAIL RESEARCH AT NSSL: IMPROVING THE DETECTION AND QUANTIFICATION OF HAIL** *1) Jeffrey Snyder, 2) Arthur Witt, 3) Alexander Ryzhkov, 4) Valery Melnikov, 5) Sean Waugh, 6) Kiel Ortega* 1) NOAA/OAR National Severe Storms Laboratory, 2) NOAA/OAR National Severe Storms Laboratory, 3) NOAA/OAR National Severe Storms Laboratory - Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma - , 4) NOAA/OAR National Severe Storms Laboratory - Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma - , 5) NOAA/OAR National Severe Storms Laboratory, 6) NOAA/OAR National Severe Storms Laboratory - Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma -
	3	17:15 17:30	**A POLARIMETRIC RADAR ANALYSIS OF PRE-MONSOON DEEP CONVECTIVE SYSTEMS AND A HAIL-PRODUCING EVENT OBSERVED IN THE MONSOON CORE ZONE** *1) Kumar Abhijeet, 2) Sachin M. Deshpande, 3) Govindan Pandithurai* 1) Atmospheric Research Testbed Central India, Silkheda - Indian Institute of Tropical meteorology, Pune - , 2) Indian Institute of Tropical meteorology, Pune, 3) Indian Institute of Tropical meteorology, Pune
	4	17:30 17:45	**FRAGMENTATION OF GRAUPEL AND SNOWFLAKES DUE TO COLLISION** *1) Miklós Szakáll, 2) Sudha Yadav, 3) Stefan Kneifel, 4) Leonie von Terzi, 5) Axel Seifer, 6) Christoph Siewert* 1) Institute for Atmospheric Physics, Johannes Gutenberg University of Mainz, Germany, 2) Institute for Atmospheric Physics, Johannes Gutenberg University of Mainz, Germany, 3) Meteorological Institute, LMU Munich, Germany, 4) Meteorological Institute, LMU Munich, Germany, 5) German Weather Service, 6) German Weather Service
	5	17:45 18:00	**HOW IMPORTANT IS TURBULENCE FOR THE FORMATION OF SNOW AGGREGATION AND RIMING IN ARCTIC CLOUDS?** *1) Stefan Kneifel, 2) Giovanni Chellini* 1) Ludwig-Maximilians University Munich (LMU), 2) University of Cologne
	6	18:00 18:15	**GROUND-BASED PRECIPITATION RADAR SIGNATURES OF ANTHROPOGENIC SNOWFALL EVENTS DOWNWIND OF INDUSTRIAL AIR POLLUTION HOT SPOTS** *1) Jorma Rahu, 2) Tanel Voormansik, 3) Daniel Michelson, 4) Emma Hung, 5) Norman Donaldson, 6) Hannes Keernik, 7) Heido Trofimov, 8) Piia Post, 9) Velle Toll* 1) University of Tartu - Estonian Environment Agency - , 2) University of Tartu - Estonian Environment Agency - , 3) Environment and Climate Change Canada, 4) Environment and Climate Change Canada, 5) Environment and Climate Change Canada, 6) University of Tartu, 7) University of Tartu, 8) University of Tartu, 9) University of Tartu
	7	18:15 18:30	**STUDY ON MICROPHYSICAL CHARACTERISTICS OF SNOWFALL IN EASTERN CHINA USING TWO-DIMENSIONAL VIDEO DISDROMETER AND DUAL-POLARIZATION RADAR DATA** *1) Hao Huang, 2) Kun Zhao, 3) Ranting Tao* 1) School of Atmospheric Sciences, Nanjing University, 2) School of Atmospheric Sciences, Nanjing University, 3) School of Atmospheric Sciences, Nanjing University
	8	18:30 18:45	**CONVERGING THE ICON 2-MOMENT MICROPHYSICS TO OBSERVATIONS: EVALUATION WITH POLARIMETRIC MICROPHYSICAL RETRIEVALS** *1) Julian Steinheuer, 2) Velibor Pejcic, 3) Jana Mendrok, 4) Ulrich Blahak, 5) Alberto de Lozar, 6) Silke Trömel* 1) Deutscher Wetterdienst, Offenbach, Germany, 2) Institute of Geosciences, Meteorology Section, University of Bonn, 3) Deutscher Wetterdienst, Offenbach, Germany, 4) Deutscher Wetterdienst, Offenbach, Germany, 5) Deutscher Wetterdienst, Offenbach, Germany, 6) Institute of Geosciences, Meteorology Section, University of Bonn

Session	6	Aula Archeologia		Operational aspects
	1	16:45	17:00	**SWIRL: THE FIRST AUSTRALIAN OPERATIONAL RADAR-BASED 3D WIND ANALYSIS**
				1) Valentin Louf, 2) Alain Protat, 3) Jordan Brook
				1) Australian Bureau of Meteorology, 2) Australian Bureau of Meteorology, 3) Australian Bureau of Meteorology
	2	17:00	17:15	**THREE-DIMENSIONAL VARIATIONAL MULTI-DOPPLER WIND RETRIEVAL OVER COMPLEX TERRAIN**
				1) Ting-Yu Cha, 2) Michael M. Bell
				1) National Center for Atmospheric Research, 2) Colorado State University
	3	17:15	17:30	**ADVANCED RADAR CALIBRATION: PULSE COMPRESSION VS. CONVENTIONAL SYSTEMS**
				1) Marc Schneebeli, 2) Philipp Schmid, 3) Andreas Leuenberger, 4) Heather Corden, 5) Jacopo Grazioli, 6) Alexis Berne, 7) David Schvartzman, 8) Boonleng Cheong, 9) Jim George, 10) Francesc Junyent, 11) Patrick Kennedy, 12) Venkatachalam Chandrasekar
				1) Palindrome Remote Sensing, Landquart, Switzerland, 2) University of Bern, Bern, Switzerland - Meteosvizzera, Locarno, Switzerland - Palindrome Remote Sensing, Landquart, Switzerland, 3) Palindrome Remote Sensing, Landquart, Switzerland, 4) École Polytechnique Fédérale de Lausanne (EPFL), LTE, Lausanne, Switzerland, 5) École Polytechnique Fédérale de Lausanne (EPFL), LTE, Lausanne, Switzerland, 6) École Polytechnique Fédérale de Lausanne (EPFL), LTE, Lausanne, Switzerland, 7) University of Oklahoma, Advanced Radar Research Center, Norman, US, 8) University of Oklahoma, Advanced Radar Research Center, Norman, US, 9) Colorado State University, Fort Collins, US, 10) Colorado State University, Fort Collins, US, 11) Colorado State University, Fort Collins, US, 12) Colorado State University, Fort Collins, US
	4	17:30	17:45	**APACHE AIRFLOW BASED RADAR DATA PROCESSING ARCHITECTURE AT THE FINNISH METEOROLOGICAL INSTITUTE**
				1) Joonas Karjalainen
				1) Finnish Meteorological Institute
	5	17:45	18:00	**IMPACT OF DIFFERENT REFLECTIVITY RADAR-BASED PRODUCTS ON THE PERFORMANCES OF A METEOROLOGICAL FORECASTING MODELING CHAIN**
				1) Luca Rovai, 2) Alberto Ortolani, 3) Samantha Melani, 4) Andrea Antonini, 5) Luca Fibbi, 6) Bernardo Gozzini
				1) National Research Council of Italy, Institute for the BioEconomy (CNR-IBE), Sesto Fiorentino (Florence), Italy - LaMMA Consortium, Sesto Fiorentino (Florence), Italy - , 2) National Research Council of Italy, Institute for the BioEconomy (CNR-IBE), Sesto Fiorentino (Florence), Italy - LaMMA Consortium, Sesto Fiorentino (Florence), Italy - , 3) National Research Council of Italy, Institute for the BioEconomy (CNR-IBE), Sesto Fiorentino (Florence), Italy - LaMMA Consortium, Sesto Fiorentino (Florence), Italy - , 4) LaMMA Consortium, Sesto Fiorentino (Florence), Italy, 5) National Research Council of Italy, Institute for the BioEconomy (CNR-IBE), Sesto Fiorentino (Florence), Italy - LaMMA Consortium, Sesto Fiorentino (Florence), Italy - , 6) LaMMA Consortium, Sesto Fiorentino (Florence), Italy
	6	18:00	18:15	**USE OF DUAL-POLE RADAR DATA IN OPERATIONAL NOWCASTING INFORMATION AT DWD**
				1) Tim Böhme
				1) Deutscher Wetterdienst, 63067 Offenbach, Germany
	7	18:15	18:30	**RADAR-BASED STUDIES OF TERRAIN-INDUCED WINDSHEAR AND MICROBURSTS NEAR THE HONG KONG INTERNATIONAL AIRPORT DURING THE PASSAGE OF SUPER TYPHOON SAOLA IN SEPTEMBER 2023**
				1) Ying Wa Chan
				1) Hong Kong Observatory
	8	18:30	18:45	**ADVANCES IN PRECIPITATION ESTIMATION USING THE SOPHY WEATHER RADAR**
				1) Carlos Del-Castillo Velarde, 2) Ken Takahashi Guevara, 3) Danny E Scipion, 4) Ricardo Reinoso-Rondinel
				1) Instituto Geofísico del Perú, Lima, Peru, 2) Instituto Geofísico del Perú, Lima, Peru, 3) Instituto Geofísico del Perú, Lima, Peru, 4) Civil Engineering, Hydraulics & Geotechnics, KU Leuven, Leuven, Belgium - Royal Meteorological Institute of Belgium, Brussels, Belgium -

Day	3			**Wednesday, September 11, 2024**
		Aula Magna		**GUTTA AUREA Award Cerimony**
		8:45	9:15	The Marzano "Gutta Aurea" (golden drop, in latin) award has the ambition of preserving the human and scientific memory of our late colleague Frank Marzano, who passed away prematurely and unexpectedly in 2022 at the age of 59 and intends to recognize outstanding international contributions in remote sensing applied to atmospheric science, meteorology, and telecommunications. The winner of the 2024 edition will be announced and will be required to give a keynote speech.

Session	1	Aula Magna		**Operational aspects**
	1	9:20	9:35	**ASSESSMENT OF HAIL DETECTION CAPABILITY OF HYDROMETEOR IDENTIFICATION ALGORITHM OVER C-BAND NETWORK** *1) Paola Salio, 2) Esteban Garuti, 3) Vito Galligani, 4) Maite Cancelada, 5) Fernanda Verdelho, 6) Cesar Beneti* 1) Universidad de Buenos Aires. Facultad de Ciencias Exactas y Naturales. Departamento de Ciencias de la Atmósfera y los Océanos. Buenos Aires, Argentina. - CONICET – Universidad de Buenos Aires. Centro de Investigaciones del Mar y la Atmósfera. Buenos Aires, Argentina. Instituto Franco-Argentino de Estudios sobre el Clima y sus Impactos – IRL 3351 – CNRS-CONICET-IRD-UBA. Buenos Aires, Argentina. - , 2) Servicio Meteorológico Nacional. Buenos Aires Argentina. - Universidad de Buenos Aires. Facultad de Ciencias Exactas y Naturales. Departamento de Ciencias de la Atmósfera y los Océanos. Buenos Aires, Argentina. - , 3) Servicio Meteorológico Nacional. Buenos Aires Argentina. - CONICET – Universidad de Buenos Aires. Centro de Investigaciones del Mar y la Atmósfera. Buenos Aires, Argentina. Instituto Franco-Argentino de Estudios sobre el Clima y sus Impactos – IRL 3351 – CNRS-CONICET-IRD-UBA. Buenos Aires, Argentina. - , 4) Universidad de Buenos Aires. Facultad de Ciencias Exactas y Naturales. Departamento de Ciencias de la Atmósfera y los Océanos. Buenos Aires, Argentina., 5) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil., 6) SIMEPAR - Environmental Technology and Monitoring Services, Curitiba, Brazil.
	2	9:35	9:50	**A DEEP EVALUATION OF SEVERE HAIL ALGORITHMS USING CONVENTIONAL RADAR METRICS AND A NEW CNN-BASED APPROACH APPLIED TO MÉTÉO-FRANCE RADAR NETWORK** *1) Clotilde Augros, 2) Vincent Forcadell, 3) Maxandre Ouradou, 4) Olivier Caumont, 5) Pierre Lepetit, 6) Cloé David* 1) CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France, 2) CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France - Descartes Underwriting, Paris, France - , 3) CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France, 4) Météo-France, Direction des opérations pour la prévision, Toulouse, France - CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France - , 5) Météo-France, Direction de l'Observation, Toulouse, France, 6) CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France
	3	9:50	10:05	**AN INNOVATIVE APPROACH FOR REAL-TIME HAIL SIZE ESTIMATION** *1) Valentina Gregori, 2) Antonio Frigioni, 3) Nicola Carlon, 4) Andrea Chini, 5) Massimo Crespi, 6) Gianluca Ferrari* 1) Hypermeteo S.r.l., 2) Radarmeteo S.r.l., 3) Radarmeteo S.r.l., 4) Hypermeteo S.r.l., 5) Hypermeteo S.r.l., 6) Hypermeteo S.r.l.
	4	10:05	10:20	**IMPROVING ZDR COLUMN DETECTION WITH THE "HOTSPOT METHOD"** *1) Vinzent Klaus, 2) John Krause* 1) BOKU University, Institute of Meteorology and Climatology, Vienna, Austria, 2) Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO), Norman, Oklahoma
	5	10:20	10:35	**DEVELOPMENT OF AN OPERATIONAL SURFACE HYDROMETEOR CLASSIFICATION ALGORITHM FOR THE NEXRAD NETWORK** *1) Jacob Carlin, 2) Lee Dunnavan, 3) John Krause, 4) Marcus Johnson* 1) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman, Oklahoma, USA - NOAA/OAR National Severe Storms Laboratory, Norman, Oklahoma, USA - , 2) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman, Oklahoma, USA - NOAA/OAR National Severe Storms Laboratory, Norman, Oklahoma, USA - , 3) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman, Oklahoma, USA - NOAA/OAR National Severe Storms Laboratory, Norman, Oklahoma, USA - , 4) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma, Norman, Oklahoma, USA -
	6	10:35	10:50	**RAPID-SCAN OBSERVATIONS OF TORNADOGENESIS AND SENSITIVITIES TO RADAR-BASED THRESHOLDS: TRENDS, QUESTIONS, AND OPERATIONAL IMPLICATIONS** *1) Jana Houser, 2) Howard B Bluestein* 1) The Ohio State University, 2) The University of Oklahoma

Session	2	Aula Archeologia		**Clouds and precipitation physics**
	1	9:20	9:35	**CLOUD DSD DISPERSION AND SENSING THE ONSET OF COLLISION-COALESCENCE AND DRIZZLE FROM REMOTE AND IN-SITU MEASUREMENTS** *1) Jothiram Vivekanandan, 2) Alexander Kostinski, 3) Gwo-Jong Huang* 1) National Center for Atmospheric Research, 2) Michigan Technological University, 3) Colorado State university
	2	9:35	9:50	**DROPLETS SIZE COMPARISON FROM DIFFERENT RETRIEVAL ALGORITHMS: A CASE STUDY AT CLOUDNET GRANADA STATION** *1) Matheus Tolentino, 2) Maria José Granados-Muñoz, 3) Francisco Navas-Guzmán, 4) Juan Luíz Guerrero-Rascado, 5) Lucas Alados-Arboleda, 6) Juan Antonio Bravo-Aranda* 1) Department of Applied Physics, University of Granada - Andalusian Institute for Earth System Research - , 2) Department of Applied Physics, University of Granada - Andalusian Institute for Earth System Research - , 3) Department of Applied Physics, University of Granada - Andalusian Institute for Earth System Research - , 4) Department of Applied Physics, University of Granada - Andalusian Institute for Earth System Research - , 5) Department of Applied Physics, University of Granada - Andalusian Institute for Earth System Research - , 6) Department of Applied Physics, University of Granada - Andalusian Institute for Earth System Research -
	3	9:50	10:05	**DECODING CLOUD MICROPHYSICS: A STUDY USING THE INNOVATIVE PROCESS-ORIENTED VERTICAL PROFILE (POVP) TECHNIQUE WITH WSR-88D RADAR OBSERVATIONS** *1) Jiaxi Hu, 2) Pengfei Zhang, 3) Ryzhkov Alexander* 1) Cooperative Institute for Severe aHigh-Impact Weather Research and Operations, University of Oklahoma, Norman, OK 73072, USA - NOAA/OAR National Severe Storms Laboratory, Norman, OK 73072, USA - , 2) Cooperative Institute for Severe aHigh-Impact Weather Research and Operations, University of Oklahoma, Norman, OK 73072, USA - NOAA/OAR National Severe Storms Laboratory, Norman, OK 73072, USA - , 3) Cooperative Institute for Severe aHigh-Impact Weather Research and Operations, University of Oklahoma, Norman, OK 73072, USA - NOAA/OAR National Severe Storms Laboratory, Norman, OK 73072, USA -
	4	10:05	10:20	**PREDICTING RIMING FROM DOPPLER CLOUD RADAR OBSERVATIONS USING ARTIFICIAL NEURAL NETWORK** *1) Teresa Vogl, 2) Maximilian Maahn, 3) Stefan Kneifel, 4) Willi Schimmel, 5) Dmitri Moisseev, 6) Heike Kalesse-Los* 1) Leipzig University, Leipzig, Germany, 2) Leipzig University, Leipzig, Germany, 3) Ludwig Maximilians Universität, Munich, Germany , 4) Leibniz Institute for Tropospheric Research, Leipzig, Germany, 5) Finnish Meteorological Institute, Helsinki, Finland, 6) Leipzig University, Leipzig, Germany
	5	10:20	10:35	**MICRO RAIN RADAR BASED ANALYSIS OF RAINFALL EVAPORATION EFFECTS DURING THE LIAISE FIELD CAMPAIGN** *1) Joan Bech, 2) Albert Garcia-Benadi, 3) Mireia Udina, 4) Francesc Polls, 5) Eric Peinó, 6) Alexandre Paci, 7) Brice Boudevillain* 1) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain - Water Research Institute, Universitat de Barcelona, Barcelona, Spain - , 2) UTG Campus de Vilanova i la Geltrú, Universitat Politècnica de Catalunya, Spain, 3) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain, 4) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain, 5) Dept. Applied physics - Meteorology, Universitat de Barcelona, Barcelona, Spain, 6) CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France, 7) Université Grenoble Alpes, CNRS, IRD, Grenoble-INP, Grenoble, France
	6	10:35	10:50	**UTILIZING RADAR OBSERVATIONS TO AUTOMATE CLASSIFICATION OF BOUNDARY LAYER ORGANIZATIONAL MODE USING CONVOLUTIONAL NEURAL** *1) Hyeri Kim, 2) David Bodine* 1) Advanced Radar Research Center - University of Oklahoma - , 2) Advanced Radar Research Center - University of Oklahoma -

Day	4		Thursday, September 12, 2024
		Aula Magna	**Keynote part 1: COMPARISON BETWEEN DPR VERSION 7 AND DISDROMETERS OVER ITALY**
		8:45 9:15	**Keynote Speaker: HUMMEL EUROPEAN SPACE AGENCY (ESA), ESRIN, FRASCATI, ITALY**

B. Frommknecht(1), Thorsten Fehr, (1) Dirk Bernaerts (1), Patrick Deghaye (1), Michael Eisinger (1) Timon Hummel (1), Kubota Takuji (2), Rob Koopman (1), Nio Tomomi (1) Stephanie Rusli (1), Toshiyuko Tanaka (2), Tomita Eiichi (2), Vasileios Tzallas (1), Jonas von Bismarck (1), Kotska Wallace (1), Christophe Caspar (1)

(1) European Space Agency (ESA), (2) Japan Space Exploration Agency (JAXA)

Keynote part 2: COMPARISON BETWEEN DPR VERSION 7 AND DISDROMETERS OVER ITALY

Keynote Speaker: ANGELONI NATIONAL RESEARCH COUNCIL, INSTITUTE OF ATMOSPHERIC SCIENCE AND CLIMATE (CNR-ISAC), ROME, ITALY

H. Okamoto (1), Kaori Sato (1), Allabakash Sheik (1), Tomoaki Nishizawa (2), Hiroaki Horie (3), Hironori Iwai (3), Mana Ueno (1), Masaki Satoh(4), Woosub Roh (4), Takashi Nakajima (5)

(1) Research Institute for Applied Mechanics, Kyushu University, (2) National Institute for Environmental Studies, (3) National Institute of Information and Communications Technology, (4) Atmosphere and Ocean Research Institute, The University of Tokyo, (5) Tokai University.

Session	1	Aula Magna	**Space borne clouds and precipitation radar**
	1	9:20 9:35	**EARTHCARE - STATUS UPDATE ON PROCESSOR AND PRODUCTS**

1) Timon Hummel, 2) Dirk Bernaerts, 3) Jonas von Bismarck, 4) Christophe Caspar, 5) Patrick Deghaye, 6) Michael Eisinger, 7) Thorsten Fehr, 8) Bjoern Frommknecht, 9) Rob Koopman, 10) Fabien Marnas, 11) Stephanie Ruesli, 12) Vasileios Tziallas, 13) Kotska Wallace)

Netherlands , 4) European Space Agency (ESA), ESRIN, Frascati, Italy , 5) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 6) European Space Agency (ESA), ECSAT, Harwell, United Kingdom , 7) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 8) European Space Agency (ESA), ESRIN, Frascati, Italy , 9) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 10) European Space Agency (ESA), ESTEC, Noordwijk, The Netherlands , 11) European Space Agency (ESA), ESTEC, Noordwijk, The

	2	9:35 9:50	**CLOUD AND PRECIPITATION MICROPHYSICAL RETRIEVALS FROM THE EARTHCARE CLOUD PROFILING RADAR: THE C-CLD PRODUCT**

1) Kamil Mroz, 2) Bernat Puidgomènech Treserras, 3) Alessandro Battaglia, 4) Pavlos Kollias, 5) Frederic Tridon

1) National Centre for Earth Observation, University of Leicester, UK, 2) Department of Atmospheric and Oceanic Sciences, McGill University, Montreal, Canada, 3) Politecnico of Turin, Turin, Italy, 4) Division of Atmospheric Sciences, Stony Brook University, NY, USA - Department of Atmospheric and Oceanic Sciences, McGill University, Montreal, Canada - , 5) Politecnico of Turin, Turin, Italy

	3	9:50 10:05	**CLOUD-PRECIPITATION PARTICLE CATEGORIES OBSERVED FROM SPACE BORNE ACTIVE SENSOR**

1) Kaori Sato, 2) Hajime Okamoto

1) Research Institute for Applied Mechanics, Kyushu University, 2) Research Institute for Applied Mechanics, Kyushu University

	4	10:05 10:20	**THE NASA INCUS MISSION AND OBSERVATIONS OF CONVECTIVE MASS FLUX THROUGH REFLECTIVITY DIFFERENCING**

1) Brenda Dolan, 2) Susan van den Heever, 3) Pavlos Kollias, 4) Peter Marinescu, 5) Derek Posselt, 6) Randy Chase, 7) Kristen Rasmussen, 8) Rick Schulte, 9) Jennie Bukowski, 10) Itinderjot Singh, 11) Leah Grant

1) Colorado State University, 2) Colorado State University, 3) Stony Brook University - Brookhaven National Laboratory - , 4) Colorado State University, 5) Jet Propulsion Laboratory, 6) Colorado State University - Cooperative Institude for Research in the Atmosphere - , 7) Colorado State University, 8) Colorado State University, 9) Colorado State University, 10) Colorado State University, 11) Colorado State University

	5	10:20 10:35	**CHARACTERIZING WINDS AND CLOUDS INSIDE TROPICAL CYCLONES WITH THE PROPOSED ESA EARTH EXPLORER 11 WIVERN MISSION**

1) Frederic Tridon, 2) Alessandro Battaglia, 3) Ali Rizik, 4) Anthony Illingworth

1) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy, 2) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy, 3) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy, 4) Department of Meteorology, University of Reading, Reading, UK

	6	10:35 10:50	**VALIDATION OF EARTHCARE REFLECTIVITY WEIGHTED MEAN DOPPLER VELOCITY IN RAINFALL BY USING DUAL-POLARIZATION WEATHER RADAR OBSERVATIONS**

1) Bernd Mom, 2) Mario Montopoli, 3) Alessandro Bracci, 4) Elisa Adirosi, 5) Luca Baldini, 6) Dmitri Moisseev

1) University of Helsinki, Helsinki, Finland, 2) National Research Council, Institute of Atmospheric Sciences and Climate, Italy - Center of Excellence Telesensing of Environment and Model Prediction of Severe Events (CETEMPS), L'Aquila, Italy - , 3) National Research Council, Institute of Atmospheric Sciences and Climate, Italy, 4) National Research Council, Institute of Atmospheric Sciences and Climate, Italy, 5) National Research Council, Institute of Atmospheric Sciences and Climate, Italy, 6) University of Helsinki, Helsinki, Finland - Finnish Meteorological Institute, Helsinki, Finland -

Session	2	Aula Archeologia	**Radar and society**
	1	9:20 9:35	**OPEN RADAR SCIENCE**

1) Scott Collis, 2) Kai Mühlbauer, 3) Max Grover, 4) Zach Sherman, 5) Robert Jackson, 6) Mike Dixon, 7) Michael Bell, 8) Stephen W. Nesbitt, 9) Robin Tanamachi, 10) Daniel Michelson, 11) Joshua Soderholm, 12) Brian Rose, 13) Kevin Tyle, 14) Tom Nicholas

1) Environmental Sciences Division, Argonne National Laboratory, 2) Institute of Geosciences, Meteorology Section, University Bonn, Germany, 3) Environmental Science Division, Argonne National Laboratory, 4) Environmental Science Division, Argonne National Laboratory, 5) Environmental Science Division, Argonne National Laboratory, 6) National Center for Atmospheric Research, 7) Department of Atmospheric Science, Colorado State University, 8) Department of Climate, Meteorology & Atmospheric Sciences, University of Illinois Urbana-Champaign, 9) Department of Earth, Atmospheric, and Planetary Sciences, Purdue University, 10) Environment and Climate Change Canada, 11) Science and Innovation Group, Bureau of Meteorology, Australia, 12) Department of Atmospheric and Environmental Sciences, University at Albany (State University of New York), 13) Department of Atmospheric and Environmental Sciences, University at Albany (State University of New York), 14) CWorthy LLC

	2	9:35 9:50	**THE LIDAR RADAR OPEN SOFTWARE ENVIRONMENT (LROSE) SCIENCE GATEWAY: RADAR ANALYSIS IN THE CLOUD**

1) Jennifer DeHart, 2) Brenda Javornik, 3) Ana Espinoza, 4) Michael Bell, 5) Julien Chastang, 6) Michael Dixon

1) Colorado State University, 2) National Center for Atmospheric Research, 3) NSF Unidata, 4) Colorado State University, 5) NSF Unidata, 6) National Center for Atmospheric Research

	3	9:50 10:05	**THE ROLE OF WEATHER RADAR APPLICATIONS IN ENVIRONMENTAL IMPACT ASSESSMENTS**

1) Nadja Weisshaupt, 2) Pekka Alho

1) Finnish Meteorological Institute, 2) Turku University of Applied Sciences

	4	10:05 10:20	**COMPARING RADAR DATA AND PRECIPITATION GROUND TRUTH: WHERE CAN IOT SENSORS HELP?**

1) Thomas Einfalt, 2) Bruno Castro, 3) Annika Jahnke-Bornemann

1) hydro & meteo GmbH, 2) hydro & meteo GmbH, 3) hydro & meteo GmbH

	5	10:20 10:35	**PROPOSAL OF HAIL FORECAST METHOD AND PERFORMANCE EVALUATION UTILIZING SOCIAL MEDIA POST DATA**

1) Yuta Ozawa, 2) Takahisa Wada, 3) Satoshi Kida, 4) Masakazu Wada, 5) Yasunori Nakagawa, 6) Osamu Yamanaka

1) Infrastructure Systems Research and Development Center, Toshiba Infrastructure Systems & Solutions Corporation, 2) Infrastructure Systems Research and Development Center, Toshiba Infrastructure Systems & Solutions Corporation, 3) Toshiba Corporation, 4) Toshiba Corporation, 5) Toshiba Digital Solutions Corporation, 6) Infrastructure Systems Research and Development Center, Toshiba Infrastructure Systems & Solutions Corporation

	6	10:35 10:50	**RADAR PRODUCTS AT THE ESSL TESTBED AND THE TIM FIELD CAMPAIGN**

1) Pieter Groenemeijer, 2) Alois M. Holzer, 3) Tomáš Púčik, 4) Francesco Battaglioli, 5) Stefan Eisenbach, 6) Jannick Fischer

1) European Severe Storms Laboratory, 2) European Severe Storms Laboratory, 3) European Severe Storms Laboratory, 4) European Severe Storms Laboratory, 5) European Severe Storms Laboratory, 6) Institute for Meteorology and Climatology, Karlsruhe Institute of Technology

Session	3	Aula Magna	**Operational aspects**
	1	14:15 14:30	**THE NEW CANADIAN WEATHER RADAR NETWORK - FROM PROJECT TO OPERATIONS**

1) Qian Li, 2) Sylvain Laramée, 3) Steven Brady, 4) Michael Romaniuk

1) National Radar Operations, Meteorological Service of Canada, Environment and Climate Change Canada - Canadian Weather Radar Replacement Program, Meteorological Service of Canada, Environment and Climate Change Canada - , 2) Canadian Weather Radar Replacement Program, Meteorological Service of Canada, Environment and Climate Change Canada, 3) National Radar Operations, Meteorological Service of Canada, Environment and Climate Change Canada, 4) National Radar Operations, Meteorological Service of Canada, Environment and Climate Change Canada

	2	14:30 14:45	**RADAR NETWORK DEPLOYMENT IN COMPLEX TERRAIN**

1) Renzo Bechini, 2) V. Chandrasekar, 3) Rob Cifelli, 4) Francesc Junyent

1) Arpa Piemonte - Colorado State University - , 2) Colorado State University, 3) NOAA, 4) Colorado State University

	3	14:45 15:00	**MITIGATING RADIOFREQUENCY INTERFERENCE IMPACTING CANADA'S S-BAND WEATHER RADARS**

1) Hamid hamid

1) Environment Canada - Environment Canada - Environment Canada

4	15:00	15:15	**INCORPORATING X-BAND RADAR OBSERVATIONS INTO THE GERMAN C-BAND NETWORK** *1) Nikolaos Antonoglou, 2) Manuel Werner, 3) Ulrich Blahak, 4) Kathleen Helmert* 1) Deutscher Wetterdienst, 2) Deutscher Wetterdienst, 3) Deutscher Wetterdienst, 4) Deutscher Wetterdienst
5	15:15	15:30	**A WIND TURBINE CLUTTER MITIGATION SOLUTION FOR THE NEXRAD NETWORK** *1) Feng Nai, 2) Sebastián Torres* 1) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma - NOAA/OAR National Severe Storms Laboratory - , 2) Cooperative Institute for Severe and High-Impact Weather Research and Operations, University of Oklahoma - NOAA/OAR National Severe Storms Laboratory -
6	15:30	15:45	**VARIABILITY OF THE WEATHER RADAR ALGORITHMS ACROSS THE ITALIAN TERRITORY** *1) Elisa Adirosi, 2) Federico Porcù, 3) Mario Montopoli, 4) Luca Baldini, 5) Alessandro Bracci, 6) Sabina Angeloni, 7) Vincenzo Capozzi, 8) Clizia Annella, 9) Giorgio Budillon, 10) Edoardo Bucchignani, 11) Alessandra Lucia Zollo, 12) Orietta Cazzuli, 13) Giulio Camisani, 14) Gian Paolo Minardi, 15) Renzo Bechini, 16) Roberto Cremonini, 17) Andrea Antonini, 18) Alberto Ortolani, 19) Samantha Melani, 20) Lorenzo Luini, 21) Roberto Nebuloni, 22) Vincenzo Rizi, 23) Paolo Valisa, 24) Simone Scapin, 25) Mauro Coltelli, 26) Giuseppe Giammello, 27) Giacomo Cavalli, 28) Roberto Pinna Nossai* 1) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy; , 2) Department of Physics and Astronomy "Augusto Righi", University of Bologna, Bologna, Italy;, 3) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy; - Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy; - , 4) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy; 5) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Bologna, Italy; , 6) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy; , 7) Department of Science and Technology, University of Naples "Parthenope", Naples, Italy;, 8) Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy; - Department of Science and Technology, University of Naples "Parthenope", Naples, Italy; - , 9) Department of Science and Technology, University of Naples "Parthenope", Naples, Italy;, 10) Meteorology Lab, Centro Italiano Ricerche Aerospaziali (CIRA), Capua, Italy;, 11) Meteorology Lab, Centro Italiano Ricerche Aerospaziali (CIRA), Capua, Italy;, 12) Regional Agency for the Protection of the Environment of Lombardy (ARPA Lombardia), Milan, Italy;, 13) Regional Agency for the Protection of the Environment of Lombardy (ARPA Lombardia), Milan, Italy;, 14) Regional Agency for the Protection of the Environment of Lombardy (ARPA Lombardia), Milan, Italy;, 15) Regional Agency for the Protection of the Environment of Piemonte (ARPA Piemonte), Turin, Italy;, 16) Regional Agency for the Protection of the Environment of Piemonte (ARPA Piemonte), Turin, Italy;, 17) Laboratory of Environmental Monitoring and Modelling for the sustainable development (LaMMA), Sesto Fiorentino (Florence), Italy, 18) Laboratory of Environmental Monitoring and Modelling for the sustainable development (LaMMA), Sesto Fiorentino (Florence), Italy - National Research Council of Italy, Institute for the BioEconomy (CNR-IBE), Sesto Fiorentino (Florence), Italy - , 19) Laboratory of Environmental Monitoring and Modelling for the sustainable development (LaMMA), Sesto Fiorentino (Florence), Italy - National Research Council of Italy, Institute for the BioEconomy (CNR-IBE), Sesto Fiorentino (Florence), Italy - , 20) Politecnico di Milano, Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB), Milan, Italy, 21) National Research Council , Institute of Electronics, Computer and Telecommunication Engineering (CNR-IEIIT), Milan, Italy, 22) University of Ll'Aquila, Physical and Chemical Sciences (DSFC), L'Aquila, Italy, 23) Società Astronomica Schiaparelli, Centro Geofisico Prealpino, Varese, Italy, 24) Società Astronomica Schiaparelli, Centro Geofisico Prealpino, Varese, Italy, 25) National Institute of Geophysics and Volcanology (INGV), Osservatorio Etneo, Catania, Italy, 26) National Institute of Geophysics and Volcanology (INGV), Osservatorio Etneo, Catania, Italy, 27) Regional Agency for the Protection of the Environment of Sardegna (Arpa Sardegna), Sassari, Italy;, 28) Regional Agency for the Protection of the Environment of Sardegna (Arpa Sardegna), Sassari, Italy;
7	15:45	16:00	**ROC/NSSL RADAR PRODUCT IMPROVEMENT: AN R2O SUCCESS STORY** *1) Larry Hopper, 2) Michael Istok, 3) Terry Schuur* 1) NOAA/National Severe Storms Laboratory, 2) NOAA/National Weather Service Radar Operations Center, 3) University of Oklahoma Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) - NOAA/National Severe Storms Laboratory -
8	16:00	16:15	**PLANNING FOR NOAA'S NEXT GENERATION DOPPLER WEATHER RADAR SYSTEM** *1) Michael Istok, 2) Ajay Mehta, 3) Terrance Clark, 4) Frank Gallagher, III, 5) Mathew Grow, 6) Jessica Schultz* 1) NOAA / NWS / Office of Observations, 2) NOAA / NWS / Office of Observations, 3) NOAA / NWS / Office of Observations, 4) NOAA / NWS / Office of Observations, 5) NOAA / NWS / Office of Observations, 6) USAF/AFMC/LCMC/HBAW/OL-K

Session	4	Aula Archeologia	**Radar hydrometeorological applications**
	1	14:15 14:30	**ASSESSING THE ACCURACY OF RADAR RAINFALL AT CATCHMENT SCALE ACROSS GREAT BRITAIN** *1) Miguel Angel Rico-Ramirez, 2) Jiao Wang, 3) Dawei Han* 1) University of Bristol, 2) University of Bristol, 3) University of Bristol
	2	14:30 14:45	**A NEW QPE METHOD FOR WINTER RAIN EVENTS APPLIED TO THE GERMAN RADAR NETWORK** *1) Raquel Evaristo, 2) Ju-yu Chen, 3) Alexander Ryzhkov, 4) Silke Trömel* 1) University of Bonn, 2) University of Bonn, 3) NSSL NOAA - Oklahoma University - , 4) University of Bonn
	3	14:45 15:00	**OPTIMIZED RADAR RELATIONS FOR SNOW ESTIMATION VIA GROUND-BASED PARAMETER RETRIEVALS** *1) Petar Bukovcic, 2) Alexander Ryzhkov, 3) Dusan Zrnic* 1) The University of Oklahoma - CIWRO - National Severe Storms Laboratory - , 2) The University of Oklahoma - CIWRO - National Severe Storms Laboratory - , 3) National Severe Storms Laboratory
	4	15:00 15:15	**SNOW QUANTITATIVE PRECIPITATION ESTIMATION FROM THE CANADIAN S-BAND RADAR NETWORK.** *1) Sudesh Boodoo, 2) Norman Donaldson, 3) Daniel Michelson* 1) Environment and Climate Change Canada, 2) Environment and Climate Change Canada, 3) Environment and Climate Change Canada
	5	15:15 15:30	**SURFACE QUANTITATIVE PRECIPITATION ESTIMATES (SQUIRE) FROM THE X-BAND PRECIPITATION RADAR DURING THE SURFACE ATMOSPHERE INTEGRATED FIELD LABORATORY (SAIL) EXPERIMENT** *1) Robert Jackson, 2) Max Grover, 3) Joseph O'Brien, 4) Scott Collis, 5) Adam Theisen, 6) Zach Sherman, 7) Bhupendra Raut, 8) Matt Tuftedal, 9) V. Chandrasekar, 10) Dan Feldman* 1) Argonne National Laboratory, 2) Argonne National Laboratory, 3) Argonne National Laboratory, 4) Argonne National Laboratory, 5) Argonne National Laboratory, 6) Argonne National Laboratory, 7) Argonne National Laboratory, 8) Argonne National Laboratory, 9) Colorado State University, 10) Lawrence Berkeley National Laboratory
	6	15:30 15:45	**ADVANCED OPERATIONAL COMPOSITE FOR MULTI-FREQUENCY POLARIMETRIC WEATHER RADAR OBSERVATIONS IN COMPLEX TERRAIN: THE AQPI STORY** *1) Roberto Cremonini, 2) Sounak Biswas, 3) C. Radhakrishnan, 4) V. Chandrasekar, 5) Rob Cifelli* 1) Colorado State University - ARPA Piemonte - , 2) Colorado State University - NOAA Physical Sciences Laboratory - , 3) Colorado State University, 4) Colorado State University, 5) NOAA Physical Sciences Laboratory
	7	15:45 16:00	**OPERATIONAL SATELLITE PRECIPITATION PRODUCTS COMBINED WITH GROUND OBSERVATION FOR HYDROLOGICAL PURPOSES: CASE STUDIES AND APPLICATIONS** *1) Nicoletta Roberto, 2) Alexander Toniazzo, 3) Marco Petracca, 4) Luca Brocca, 5) Luca Ciabatta, 6) Simone Gabellani, 7) Silvia Puca* 1) Italian Civil Protection Department, 2) Italian Civil Protection Department, 3) ISAC- CNR, 4) IRPI-CNR, 5) IRPI-CNR, 6) CIMA, 7) Italian Civil Protection Department
	8	16:00 16:15	**THE USE OF BULK ZDR TO MITIGATE BIASES IN MRMS SPECIFIC ATTENUATION BASED QPE** *1) Stephen Cocks, 2) Lin Tang, 3) Jian Zhang* 1) CIWRO - NSSL - , 2) CIWRO - NSSL - , 3) NSSL

Session	5	Aula Magna	**Radar hydrometeorological applications**
	1	16:45 17:00	**A NEW METHODOLOGY FOR RAINFALL ESTIMATION USING SPECIFIC ATTENUATION** *1) Alexander Ryzhkov, 2) Pengfei Zhang* 1) University of Oklahoma - National Severe Storms Laboratory - , 2) University of Oklahoma - National Severe Storms Laboratory -
	2	17:00 17:15	**MERGING QUANTITATIVE PRECIPITATION ESTIMATES FROM A RESEARCH RADAR WITH AN OPERATIONAL COMPOSITE - THE IMPORTANCE OF QUALITY** *1) David Dufton, 2) Lindsay Bennett, 3) Steve Cole, 4) Ryan Neely III, 5) John Wallbank, 6) Steven Wells* 1) National Centre for Atmospheric Science, UK - University of Leeds, UK - , 2) National Centre for Atmospheric Science, UK - University of Leeds, UK - , 3) UK Centre for Ecology & Hydrology, 4) National Centre for Atmospheric Science, UK - University of Leeds, UK - , 5) UK Centre for Ecology & Hydrology, 6) UK Centre for Ecology & Hydrology
	3	17:15 17:30	**BLENDING OF RADAR, SATELLITE AND GAUGE RAINFALL DATA FOR HYDROLOGICAL APPLICATION** *1) Jayaram Pudashine, 2) Carlos Velasco-Forero, 3) Michael Vale* 1) Bureau of Meteorology, Radar Science, 2) Bureau of Meteorology, Radar Science, 3) Bureau of Meteorology, Radar Science
	4	17:30 17:45	**THE UPDATED OPENMRG: A UNIQUE OPEN MULTI-SENSOR PRECIPITATION DATA SET** *1) Remco C.Z. van de Beek, 2) Louise Petersson-Wårdh, 3) Jonas Olsson, 4) Jafet Andersson* 1) Swedish Meteorological and Hydrological Institute, 2) Swedish Meteorological and Hydrological Institute, 3) Swedish Meteorological and Hydrological Institute, 4) Swedish Meteorological and Hydrological Institute
	5	17:45 18:00	**IMPROVING THE KNMI QPE PRODUCTS THROUGH THE USE OF SPECIFIC DIFFERENTIAL PHASE** *1) Tim Vlemmix, 2) Aart Overeem, 3) Hidde Leijnse, 4) Thomas Hengstebeck* 1) KNMI, 2) KNMI - TU-Delft - , 3) KNMI, 4) DWD

	6	18:00	18:15	**COMPARISON OF KDP ESTIMATION ALGORITHMS IN SUMMER RAINFALL OBSERVATIONS IN FINLAND** *1) Miguel Aldana, 2) Seppo Pulkkinen, 3) Annakaisa von Lerber, 4) Matthew Kumjian, 5) Dmitri Moisseev* 1) Finnish Meteorological Institute - University of Helsinki - , 2) Finnish Meteorological Institute, 3) Finnish Meteorological Institute, 4) The Pennsylvania State University, 5) University of Helsinki
	7	18:15	18:30	**ASSESSING THE ADDED VALUE OF HIGH-RESOLUTION X BAND RADAR MEASUREMENTS FOR RAINFALL ESTIMATION IN WESTERN GERMANY.** *1) Daniel Sanchez-Rivas, 2) Silke Trömel* 1) Department of Meteorology, Institute of Geosciences, University of Bonn, 2) Department of Meteorology, Institute of Geosciences, University of Bonn
	8	18:30	18:45	**A NEW MICRO-PHYSICAL INTERPRETATION OF THE Z-R RELATIONSHIP FOR OPERATIONAL QPE APPLICATIONS** *1) Nan YU* 1) Centre de Météorologie Radar - Météo France
Session	**6**	**Aula Archeologia**		**Space borne clouds and precipitation radar**
	1	16:45	17:00	**AIRCRAFT OBSERVATIONS OF STRATOCUMULUS CLOUDS USING A W-BAND RADAR-RADIOMETER: PRELIMINARY RESULTS FOR THE WIVERN MISSION** *1) Cuong Nguyen, 2) Philip Gabriel, 3) Natalia Bliankinshtein, 4) Alessandro Battaglia, 5) Leonid Nichman, 6) Keyvan Ranjbar, 7) Kenny Bala, 8) Mengistu Wolde, 9) Pavlos Kollias, 10) Anthony Illingworth* 1) Flight Research Laboratory, National Research Council Canada, Ottawa, Canada, 2) Horizon Science and Technology, Wolfville, NS, Canada, 3) Flight Research Laboratory, National Research Council Canada, Ottawa, Canada, 4) Department of Environment, Land and Infrastructure Engineering, Politecnico di Torino, Torino, Italy - Department of Physics and Astronomy, University of Leicester, Leicester, UK - National Centre for Earth Observation, Leicester, UK, 5) Flight Research Laboratory, National Research Council Canada, Ottawa, Canada, 6) Flight Research Laboratory, National Research Council Canada, Ottawa, Canada, 7) Flight Research Laboratory, National Research Council Canada, Ottawa, Canada, 8) Flight Research Laboratory, National Research Council Canada, Ottawa, Canada, 9) Division of Atmospheric Sciences, Stony Brook University, Stony Brook, NY, USA - Department of Environmental and Climate Sciences, Brookhaven National Laboratory, Upton, NY, USA - , 10) Department of Meteorology, University of Reading, Reading, UK
	2	17:00	17:15	**ASSIMILATION OF DOPPLER FROM SPACE IN WRF MODEL: APPLICATION TO WIVERN RADAR FOR THE MEDICANE IANOS CASE STUDY** *1) Stefano Federico, 2) Rosa Claudia Torcasio, 3) Mario Montopoli, 4) Giulia Panegrossi, 5) Alessandro Battaglia, 6) Cinzia Cambiotti* 1) CNR-ISAC, via del Fosso del Cavaliere 100, 00133 Rome, 2) CNR-ISAC, via del Fosso del Cavaliere 100, 00133 Rome, 3) CNR-ISAC, via del Fosso del Cavaliere 100, 00133 Rome, 4) CNR-ISAC, via del Fosso del Cavaliere 100, 00133 Rome, 5) DIATI, Politecnico di Torino, Turin, 6) DIATI, Politecnico di Torino, Turin
	3	17:15	17:30	**EVALUATION OF THE POTENTIALITIES OF A SYNERGISTIC USE OF SATELLITE RADAR AND RADIOMETER OBSERVATIONS FOR SNOWFALL RETRIEVAL** *1) Andrea Camplani, 2) Daniele Casella, 3) Paolo Sanò, 4) Leo Pio D'Adderio, 5) Stefano Sebastianelli, 6) Giulia Panegrossi, 7) Alessandro Battaglia* 1) Institute of Atmospheric Sciences and Climate - National Research Council of Italy, 2) Institute of Atmospheric Sciences and Climate - National Research Council of Italy, 3) Institute of Atmospheric Sciences and Climate - National Research Council of Italy, 4) Institute of Atmospheric Sciences and Climate - National Research Council of Italy, 5) Institute of Atmospheric Sciences and Climate - National Research Council of Italy, 6) Institute of Atmospheric Sciences and Climate - National Research Council of Italy, 7) Department of Environment, Land and Infrastructure Engineering (DIATI), Politecnico di Turino, Turin, Italy
	4	17:30	17:45	**ANALYZE GPM PRECIPITATION DATA WITHOUT GETTING SOAKED - HOW GPM-API HELPS YOU STAY DRY AND WISE** *1) Gionata Ghiggi, 2) Alexis Berne* 1) École polytechnique fédérale de Lausanne, 2) École polytechnique fédérale de Lausanne
	5	17:45	18:00	**EVALUATION OF ANGLE BIN DEPENDENCY OF PRECIPITATION PRODUCT OF DUAL FREQUENCY PRECIPITATION RADAR (DPR) ONBOARD GLOBAL** *1) Nobuhiro Takahashi* 1) Institute for Space-Earth Environmental Research, Nagoya University
	6	18:00	18:15	**CHARACTERIZING WINDS AND CLOUDS INSIDE TROPICAL CYCLONES WITH THE PROPOSED ESA EARTH EXPLORER 11 WIVERN MISSION** *1) Bernd Mom, 2) Mario Montopoli, 3) Alessandro Bracci, 4) Elisa Adirosi, 5) Luca Baldini, 6) Dmitri Moisseev* 1) University of Helsinki, Helsinki, Finland, 2) National Research Council, Institute of Atmospheric Sciences and Climate, Italy - Center of Excellence Telesensing of Environment and Model Prediction of Severe Events (CETEMPS), L'Aquila, Italy - , 3) National Research Council, Institute of Atmospheric Sciences and Climate, Italy, 4) National Research Council, Institute of Atmospheric Sciences and Climate, Italy, 5) National Research Council, Institute of Atmospheric Sciences and Climate, Italy, 6) University of Helsinki, Helsinki, Finland - Finnish Meteorological Institute, Helsinki, Finland -
	7	18:15	18:30	**COMPARISON BETWEEN DPR VERSION 7 AND DISDROMETERS OVER ITALY** *1) Sabina Angeloni, 2) Elisa Adirosi, 3) Federico Porcù, 4) Mario Montopoli, 5) Luca Baldini, 6) Alessandro Bracci, 7) Vincenzo Capozzi, 8) Clizia Annella, 9) Giorgio Budillon, 10) Edoardo Bucchignani, 11) Alessandra Lucia Zollo, 12) Orietta Cazzuli, 13) Gian Paolo Minardi, 14) Renzo Bechini, 15) Roberto Cremonini, 16) Andrea Antonini, 17) Alberto Ortolani, 18) Samantha Melani, 19) Lorenzo Luini, 20) Roberto Nebuloni, 21) Vincenzo Rizi, 22) Paolo Valisa, 23) Simone Scapin, 24) Mauro Coltelli, 25) Giuseppe Giammello, 26) Giacomo Cavalli, 27) Roberto Pinna Nossai* 1) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy, 2) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy, 3) Department of Physics and Astronomy "Augusto Righi", University of Bologna, Bologna, Italy, 4) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy - Center of Excellence for Telesensing of Environment and Model Prediction of Severe events, University of L'Aquila, L'Aquila, Italy - , 5) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Rome, Italy, 6) National Research Council, Institute of Atmospheric Science and Climate (CNR-ISAC), Bologna, Italy, 7) Department of Science and Technology, University of Naples "Parthenope", Naples, Italy, 8) Department of Science and Technology, University of Naples "Parthenope", Naples, Italy, 9) Department of Science and Technology, University of Naples "Parthenope", Naples, Italy, 10) Meteorology Lab, Centro Italiano Ricerche Aerospaziali (CIRA), Capua, Italy, 11) Meteorology Lab, Centro Italiano Ricerche Aerospaziali (CIRA), Capua, Italy, 12) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy, 13) Regional Environmental Protection Agency of Lombardy (ARPA Lombardia), Milan, Italy, 14) Regional Agency for the Protection of the Environment of Piemonte (ARPA Piemonte), Turin, Italy, 15) Regional Agency for the Protection of the Environment of Piemonte (ARPA Piemonte), Turin, Italy, 16) Laboratory of Environmental Monitoring and Modelling for the sustainable development (LaMMA), Sesto Fiorentino (Florence), Italy, 17) Laboratory of Environmental Monitoring and Modelling for the sustainable development (LaMMA), Sesto Fiorentino (Florence), Italy - National Research Council of Italy, Institute for the BioEconomy (CNR-IBE), Sesto Fiorentino (Florence), Italy - , 18) Laboratory of Environmental Monitoring and Modelling for the sustainable development (LaMMA), Sesto Fiorentino (Florence), Italy - National Research Council of Italy, Institute for the BioEconomy (CNR-IBE), Sesto Fiorentino (Florence), Italy - , 19) Politecnico di Milano, Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB), Milan, Italy, 20) National Research Council, Institute of Electronics, Computer and Telecommunication Engineering (CNR-IEIIT), Milan, Italy, 21) University of L'Aquila, Physical and Chemical Sciences (DSFC), L'Aquila, Italy, 22) Società Astronomica Schiaparelli, Centro Geofisico Prealpino, Varese, Italy, 23) Società Astronomica Schiaparelli, Centro Geofisico Prealpino, Varese, Italy, 24) National Institute of Geophysics and Volcanology (INGV), Osservatorio Etneo, Catania, Italy, 25) National Institute of Geophysics and Volcanology (INGV), Osservatorio Etneo, Catania, Italy, 26) Regional Agency for the Protection of the Environment of Sardegna (Arpa Sardegna), Sassari, Italy, 27) Regional Agency for the Protection of the Environment of Sardegna (Arpa Sardegna), Sassari, Italy
	8	18:30	18:45	**HYDROMETEOR PARTITIONING RATIOS FOR DUAL-FREQUENCY SPACE-BORNE AND POLARIMETRIC GROUND-BASED RADAR OBSERVATIONS** *1) Velibor Pejcic, 2) Kamil Mroz, 3) Kai Mühlbauer, 4) Silke Trömel* 1) Institute for Geosciences, Department of Meteorology, University of Bonn, Bonn, Germany, 2) National Centre for Earth Observation, University of Leicester, Leicester, UK, 3) Institute for Geosciences, Department of Meteorology, University of Bonn, Bonn, Germany, 4) Institute for Geosciences, Department of Meteorology, University of Bonn, Bonn, Germany - Laboratory for clouds and Precipitation exploration, Geoverbund ABC/J, Bonn, Germany -

Day	5		Friday, September 13, 2024
		Aula Magna	**Keynote: REFLECTIONS ON ATTENUATION: WHERE ARE WE 70 YEARS AFTER HITSCHFELD-BORDAN?**
			Keynote Speaker: HIDDE LEIJNSE
		8:45 9:15	*1) Hidde Leijnse, 2) Iwan Holleman, 3) Remko Uijlenhoet*
			1) Royal Netherlands Meteorological Institute (KNMI) , 2) Radboud Universiteit Nijmegen, the Netherlands , 3) Delft University of Technology, the Netherlands

Session	1	Aula Magna	Weather radar and climate
	1	9:20 9:35	**A CLIMATOLOGY OF HEAVY CONVECTIVE PRECIPITATION OVER EUROPE** *1) Kelly Lombardo, 2) Miranda Bitting* 1) The Pennsylvania State University, 2) National Oceanic and Atmospheric Administration
	2	9:35 9:50	**MAPPING RAIN: NAVIGATING THE MAZE OF PRECIPITATION DATASETS ACROSS EUROPE** *1) Julian Alberto Giles, 2) Suad Hammoudeh, 3) Klaus Goergen, 4) Silke Trömel* 1) Institute of Geosciences, Meteorology Section, University of Bonn, Germany, 2) Institute of Bio- and Geosciences (IBG-3, Agrosphere), Forschungszentrum Jülich, Jülich, Germany - Centre for High-Performance Scientific Computing in Terrestrial Systems, Geoverbund ABC/J, Jülich, Germany - , 3) Institute of Bio- and Geosciences (IBG-3, Agrosphere), Forschungszentrum Jülich, Jülich, Germany - Centre for High-Performance Scientific Computing in Terrestrial Systems, Geoverbund ABC/J, Jülich, Germany - , 4) Institute of Geosciences, Meteorology Section, University of Bonn, Germany
	3	9:50 10:05	**PROPERTIES OF CONVECTIVE AND STRATIFORM PRECIPITATION OVER THE US** *1) Ulrike Romatschke, 2) Mike Dixon* 1) NSF National Center for Atmospheric Research, 2) NSF National Center for Atmospheric Research
	4	10:05 10:20	**A CLIMATOLOGICAL STUDY ON THE TWO TYPES OF BOW ECHOES OVER SOUTH CHINA** *1) Kun Zhao, 2) Ang Zhou* 1) Nanjing University, 2) Nanjing University
	5	10:20 10:35	**EXPLORING PRECIPITATION INTENSITY-DURATION-AREA-FREQUENCY (IDAF) PATTERNS USING WEATHER RADAR DATA** *1) Talia Rosin, 2) Francesco Marra, 3) Efrat Morin* 1) The Hebrew University of Jerusalem, 2) University of Padova, 3) The Hebrew University of Jerusalem
	6	10:35 10:50	**TORNADIC SUPERCELL STRUCTURES, BEST TORNADO STUDY, EXTENDED TORNADO CLIMATOLOGIES** *1) Joshua Wurman, 2) Karen Kosiba* 1) Flexible Array of Radars and Mesonets (FARM) - University of Illinois - , 2) Flexible Array of Radars and Mesonets (FARM) - University of Illinois -

Session	2	Aula Archeologia	Clouds and precipitation physics
	1	9:20 9:35	**MULTI-WAVELENGTH RADAR RETRIEVALS IN WINTER STORMS** *1) Stephen Nesbitt, 2) Kaitlyn Jesmonth, 3) Kaylee Heimes, 4) Randy Chase, 5) Robert Rauber* 1) University of Illinois Urbana-Champaign, 2) University of Illinois Urbana-Champaign, 3) University of Illinois Urbana-Champaign, 4) Colorado State University, 5) University of Illinois Urbana-Champaign
	2	9:35 9:50	**NOVEL MEASUREMENTS OF G-BAND DOPPLER SPECTRA IN ICE CLOUDS AND PRECIPITATION** *1) Karina McCusker, 2) Chris Westbrook, 3) Alessandro Battaglia, 4) Kamil Mroz, 5) Ben Courtier, 6) Peter G. Huggard, 7) Hui Wang, 8) Christopher J. Walden* 1) University of Reading, 2) University of Reading, 3) Politecnico of Turin - University of Leicester - National Centre for Earth Observation, Leicester, 4) University of Leicester - National Centre for Earth Observation, Leicester - , 5) University of Leicester, 6) RAL Space, STFC Rutherford Appleton Laboratory, 7) RAL Space, STFC Rutherford Appleton Laboratory, 8) RAL Space, STFC Rutherford Appleton Laboratory - National Centre for Atmospheric Science, Leeds -
	3	9:50 10:05	**THE ROLE OF METEOROLOGICAL CONTROLS ON ARCTIC CLOUD AND PRECIPITATION PROPERTIES FROM RADAR-BASED RETRIEVALS: RESULTS FROM MOSAIC AND SHEBA** *1) Andrew Dzambo, 2) Greg McFarquhar, 3) Matthew Shupe* 1) Cooperative Institute for Severe and High Impact Weather and Research Operations - University of Oklahoma - Norman - , 2) Cooperative Institute for Severe and High Impact Weather and Research Operations - School of Meteorology, University of Oklahoma - Norman - , 3) Cooperative Institute for Research in Environmental Sciences, University of Colorado - Boulder
	4	10:05 10:20	**GEOGRAPHICAL FINGERPRINTS ON SNOW GROWTH PROCESSES: A SURVEY FROM TROPICS 2 TO ANTARCTICA USING TRIPLE-FREQUENCY RADAR OBSERVATIONS** *1) Haoran Li, 2) Qinghui Li, 3) Stefan Kneifel, 4) Leonie v. Terzi, 5) Zheng Ruan, 6) Liping Liu, 7) Yun Zhang, 8) Chunsheng Zhang, 9) Xuejin Sun* 1) Chinese Academy of Meteorological Sciences, 2) National University of Defense Technology, 3) University of Munich, 4) University of Munich, 5) Chinese Academy of Meteorological Sciences, 6) Chinese Academy of Meteorological Sciences, 7) National University of Defense Technology, 8) Shenzhen Observatory, 9) National University of Defense Technology
	5	10:20 10:35	**COMPARISON OF VERTICALLY POINTING KA-BAND AND C-BAND RADAR OBSERVATIONS FOR THE CHARACTERIZATION OF RIMING EVENTS** *1) Paul Ockenfuß, 2) Mathias Gergely, 3) Stefan Kneifel, 4) Michael Frech* 1) Meteorologisches Institut, Ludwig-Maximilians-Universität München, Germany, 2) German Meteorological Service (Deutscher Wetterdienst, DWD), Observatorium Hohenpeißenberg, Hohenpeißenberg, Germany, 3) Meteorologisches Institut, Ludwig-Maximilians-Universität München, Germany, 4) German Meteorological Service (Deutscher Wetterdienst, DWD), Observatorium Hohenpeißenberg, Hohenpeißenberg, Germany
	6	10:35 10:50	**ANALYSIS OF KA-W RADAR RETRIEVALS OF THE DSD FOR THE PARAMETERIZATION OF RAINDROP COLLECTION AND BREAKUP PROCESSES IN BULK MODELS** *1) Laurence Niquet, 2) Frederic Tridon, 3) Pierre Grzegorczyk, 4) Antoine Causse, 5) Baptiste Bordet, 6) Wolfram Wobrock, 7) Celine Planche* 1) (1) Laboratoire de Météorologie Physique, Université Clermont Auvergne, INSU-CNRS UMR 6016, Clermont-Ferrand, France, 2) (2) DIATI, Politecnico di Torino, Turin, Italy, 3) (1) Laboratoire de Météorologie Physique, Université Clermont Auvergne, INSU-CNRS UMR 6016, Clermont-Ferrand, France, 4) (1) Laboratoire de Météorologie Physique, Université Clermont Auvergne, INSU-CNRS UMR 6016, Clermont-Ferrand, France, 5) (3) Laboratoire Interdisciplinaire de physique, Université Grenoble Alpes, INSU-CNRS UMR 5588, Grenoble, France, 6) (1) Laboratoire de Météorologie Physique, Université Clermont Auvergne, INSU-CNRS UMR 6016, Clermont-Ferrand, France, 7) (1) Laboratoire de Météorologie Physique, Université Clermont Auvergne, INSU-CNRS UMR 6016, Clermont-Ferrand, France

Session	3	Aula Magna	Radar hydrometeorological applications
	1	11:20 11:35	**ASSESSMENT OF SEVERAL MACHINE LEARNING APPROACHES FOR OPERATIONAL RADAR QPE** *1) Gianfranco Vulpiani, 2) Matteo Guidi, 3) Francesco Bosso, 4) Emilio Guerriero* 1) Department of civil protection, 2) Leonardo S.p.a., 3) Leonardo S.p.a., 4) Leonardo S.p.a.
	2	11:35 11:50	**SPATIO-TEMPORALLY CORRELATED PROBABILISTIC QUANTITATIVE PRECIPITATION ESTIMATION (QPE) BASED ON A RANDOM FOREST APPROACH, ENSEMBLE COPULA COUPLING AND OPERATIONAL RADAR DATA** *1) Rebecca Gugerli, 2) Loris Foresti, 3) Daniel Wolfensberger, 4) Francesco Zanetta, 5) Daniele Nerini, 6) Marco Gabella, 7) Ioannis V. Sideris, 8) Urs Germann, 9) Alexis Berne* 1) Environmental Remote Sensing Laboratory, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland - Radar, Satellite and Nowcasting Division, Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland - , 2) Radar, Satellite and Nowcasting Division, Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland, 3) Radar, Satellite and Nowcasting Division, Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland, 4) Institute for Atmospheric and Climate Science, Eidgenössische Technische Hochschule Zürich (ETHZ), Switzerland - Radar, Satellite and Nowcasting Division, Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland - , 5) Radar, Satellite and Nowcasting Division, Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland, 6) Radar, Satellite and Nowcasting Division, Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland, 7) Radar, Satellite and Nowcasting Division, Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland, 8) Radar, Satellite and Nowcasting Division, Federal Office of Meteorology and Climatology MeteoSwiss, Switzerland, 9) Environmental Remote Sensing Laboratory, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland
	3	11:50 12:05	**MACHINE LEARNING APPLICATION ON TUSCANY FOR RADAR-BASED QPE** *1) Andrea Antonini, 2) Samantha Melani, 3) Luca Fibbi, 4) Alessandro Mazza, 5) Alberto Ortolani* 1) LaMMA Consortium, 2) LaMMA Consortium - CNR-IBE - , 3) LaMMA Consortium - CNR-IBE - , 4) LaMMA Consortium - CNR-IBE - , 5) LaMMA Consortium - CNR-IBE -

	4	12:05	12:20	**TROPICAL RAINFALL NOWCASTING WITH COMMERCIAL MICROWAVE LINKS** *1) Bas Walraven, 2) Aart Overeem, 3) Ruben Imhoff, 4) Rolf Hut, 5) Luuk van der Valk, 6) Miriam Coenders, 7) Remko Uijlenhoet* 1) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands, 2) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute (KNMI), Utrechtseweg 297, 3731 GA De Bilt, The Netherlands - Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands - , 3) Deltares, Delft, the Netherlands, 4) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands, 5) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands, 6) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands, 7) Department of Water Management, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Delft, The Netherlands
	5	12:20	12:35	**COMPARING HYDROMETEOR CLASSIFICATION RETRIEVED FROM DUAL-POLARIZATION C-BAND DOPPLER WEATHER RADARS TO DUAL-POLARIZATION DOPPLER PROFILER OBSERVATIONS** *1) Linda Bogerd, 2) Hidde Leijnse, 3) Aart Overeem, 4) Remko Uijlenhoet, 5) Sibbo van der Veen* 1) Wageningen University and Research - Royal Netherlands Meteorological Institute - , 2) Royal Netherlands Meteorological Institute, 3) Royal Netherlands Meteorological Institute, 4) Delft University of Technology, 5) Royal Netherlands Meteorological Institute
Session	**4**	**Aula Archeologia**		**Weather radar and climate**
	1	11:20	11:35	**A DETAILED CALIBRATION STUDY AND 10 YEAR CLIMATOLOGY OF QUASI-VERTICAL PROFILES IN STRATIFORM RAIN** *1) Tobias Scharbach, 2) Silke Trömel* 1) Institute for Geosciences, Department of Meteorology, University of Bonn, Bonn, Germany, 2) Institute for Geosciences, Department of Meteorology, University of Bonn, Bonn, Germany - Laboratory for Clouds and Precipitation Exploration, Geoverbund ABC/J, Bonn, Germany -
	2	11:35	11:50	**MERGING WITH CROWDSOURCED RAIN GAUGE DATA IMPROVES OPERA RADAR PRECIPITATION ACCUMULATIONS** *1) Aart Overeem, 2) Hidde Leijnse, 3) Gerard van der Schrier, 4) Else van den Besselaar, 5) Irene Garcia-Marti, 6) Lotte Wilhelmina de Vos* 1) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute, 2) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute, 3) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute, 4) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute, 5) R&D Observations and Data Technology, Royal Netherlands Meteorological Institute, 6) Observation Operations, Royal Netherlands Meteorological Institute
	3	11:50	12:05	**LATEST RESULTS OF INCLUDING ZDR COLUMN FOR ENHANCED RADAR DATA ASSIMILATION AT GERMAN WEATHER SERVICE (DWD)** *1) Kobra Khosravian, 2) Klaus Stephan, 3) Alberto De Lozar, 4) Jana Mendrok, 5) Ulrich Blahak* 1) German Weather Service (DWD), 2) German Weather Service (DWD), 3) German Weather Service (DWD), 4) German Weather Service (DWD), 5) German Weather Service (DWD)
	4	12:05	12:20	**SUB-DAILY EXTREME PRECIPITATION TRENDS: NEW INSIGHTS FROM COMBINING RADAR DATA AND CONVECTION PERMITTING CLIMATE SIMULATIONS** *1) Alrun Jasper-Tönnies, 2) Jaya Kelvin, 3) Thomas Einfalt, 4) Christian Huebner, 5) Manfred Schütze* 1) hydro & meteo GmbH, 2) hydro & meteo GmbH, 3) hydro & meteo GmbH, 4) Institut für Automation und Kommunikation e. V., 5) Institut für Automation und Kommunikation e. V.
	5	12:20	12:35	**IMPROVEMENTS IN THE SNOWFALL SAMPLING DUE TO THE WIVERN CONICALLY SCANNING RADAR** *1) Filippo Emilio Scarsi, 2) Alessandro Battaglia, 3) Maximilian Maahn* 1) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy, 2) Department of Environment, Land and Infrastructure Engineering, Polytechnic of Turin, Turin, Italy, 3) Leipzig Institute for Meteorology (LIM), Leipzig University, Leipzig, Germany
		12:35	13:00	**Closing Cerimony** Reflections on ERAD 2024, Awards, ERAD 2026 ……….