# Agenda: iCAS Symposium 2019

Please see each day for specific information

3:00-5:00pm     Early Registration

5:00-7:00pm     Welcome Reception

9:00am    Welcome Coffee

9:45am    Opening Remarks/Anke Kamrath

10:00am "Present State and Future of Computing at ECMWF"

  Martin Palkovič

  ECMWF

10:30am  Break

11:00am "NERSC 9: A Pre-Exacscale System for Simulation, Data, and Learning"

  Richard Gerber

  National Energy Research Scientific Computing Center

  (NERSC)

11:30am  Vendor- Cray

  "Cray's Vision for converged architectures and emerging HPC technologies"

  Ilene Carpenter

12:00pm Lunch

1:30pm   Vendor- PGI

  "PGI Compiler Assisted Software Testing"

  Dave Norton

2:00pm  "Applying Data Analytics and Machine Learning to Storage Systems to Help Meet Organizational Goals"

  Bill Anderson

  NCAR

2:30pm "The New Innovation Game: Rebooting Infrastructure for more productive Climate, Weather, Earth, and Environmental Systems Research"

  Ben Evans

  National Computational Infrastructure (Australia)

3:00pm  Break

3:30pm "Data Assimilation using the US National Water Model: Application to Hurricane Florence"

  Moha el Gharamti

  NCAR

4:00pm "Pangeo: The quest to give scientists back their flow"

Niall Robinson

UK Met Office Informatics Lab

4:30pm "Climate modeling workflow at IPSL: Producing CMIP6 simulations & making sense of them"

Sébastien Denvil

Institute Pierre Simon Laplace (IPSL)

5:00pm Reception

8:00am  Welcome Coffee

9:00am  "NCAR's CMIP6 Efforts"

Sheri Mickelson

NCAR

9:30am  "Ultra-high resolution supercell simluations visualized with Vapor 3"

Leigh Orf

University of Wisconsin

10:00am "How to use deep learning in weather and climate models"

Peter Dueben

European Centre for Medium-range Weather Forecasts

(ECMWF)

10:30am  Break

11:00am  Vendor-Mellanox

"InfiniBand In-Network Computing Technology for Compute Intensive Applications"

Richard Graham

11:30am "Accelerating Improvements cycle in the climate

modeling enterprise"

Antonio Navarra

Euro-Mediterranean Center for Climate Change (CMCC)

12:00pm "Status of climate prediction and future challenges"

François Counillon

Nansen Environmental and Remote Sensing Center

(NERSC)

12:30pm  Afternoon off

2:00pm   Bus leaves for Lake Orta Excursion

~4 hour excursion

8:00am  Welcome Coffee

9:00am   "The Daniel K. Inoue Solar Telescope (DKIST): A Next Generation Ground Based Solar Telescope"

Alisdair Davey

National Solar Observatory

10:00am "Machine Learning and Data Driven HPC at NCAR: Strategy and State of Play"

Rich Loft

NCAR

10:30am  Break

11:00am "CMIP6 data infrastructure at DKRZ"

Stephan Kindermann

German Climate Computing Centre (DKRZ)

11:30am  Vendor- ARM

"Applications performance on Arm HPC architecture"

Phil Ridley

12:00pm Lunch

1:30pm   Vendor- NVIDIA

"GPU Benefits for Applications in Weather and Climate"

Stan Posey and David Hall

2:00pm "Evolving HPC and application design toward a couple data assimilation system at NASA suitable for emerging Exascale platforms"

William Putman

NASA

2:30pm "ESiWACE, the Center of Excellence in Simulation of Weather and Climate in Europe"

Joachim Biercamp

DKRZ

3:00pm  Break

3:30pm  Vendor- Intel

"Insight into Intel innovations that will bring enhancement for HPC applications"

Andrea Luiselli

4:00pm "Insights into Cloud Technologies and Machine Learning for Scientific Data"

Sara Graves

University of Alabama, Huntsville

4:30pm  "Toward Global Mesoscale Climate Prediction"

James Kinter

Center for Ocean-Land-Atmosphere Studies

5:00pm   Adjourn until Banquet

7:00pm   Banquet

8:00am    Welcome Coffee

9:00am   "Machine Learning at the Met Office"

Niall Robinson

UK Met Office Informatics Lab

9:30am   "E3SM Data Management and Publication"

Rick Wagner

Globus

10:00am   "The Future of Scientific Observation: Artificial Intelligence at the Edge"

Pete Beckman

Argonne National Laboratory

10:30am  Break

11:00am "NCAR Plan for Science at Scale"

Jeff de La Beaujardiere

NCAR

11:30am ["New Frontiers in CI and Computing for Climate and Weather Applications and How They Relate to the NSF Ten Big Ideas"](#)

[Subashree Mishra](#)

U.S. National Science Foundation

12:00pm  Lunch

1:30pm  ["The Current Status of High Performance Computing and CMIP6 at CMA"](#)

[Dr. Wang Bin](#)

National Meteorological Information Centre, CMA

2:00pm ["NCAR's Next Procurement: Meeting User's Reliability and Storage Demands"](#)

[David Hart](#)

NCAR

2:30pm  "Preliminary Study Result of Purpose Build Computing for Weather and Climate Models"

[Tsengdar Lee](#)

NASA

3:00pm  Concluding Remarks/Anke Kamrath

3:30pm  Farewell Reception