

<b>Thurs. Nov. 9</b>		
<b>8:30 – 8:40</b>	<b>WELCOME AND OPENING REMARKS</b>	
<b>8:40 – 9:40</b>	<b>KEYNOTE:</b> Models, Data, and Wisdom: How do we know when to trust a climate model?	<i>Steve Easterbrook</i> School of the Environment and Department of Computer Science, University of Toronto
<b>9:40 – 10:00</b>	<b>TALK:</b> Component Level Regression Testing in a Hierarchical Architecture	<i>Thomas Clune</i> NASA Goddard Space Flight Center
<b>10:00 – 10:20</b>	<b>TALK:</b> High Performance Climate and Weather Benchmark (HPCW): a framework for reproducible benchmarks of ESM models and mini-applications.	<i>David Guibert</i> Center for Excellence in Performance Programming, Eviden
<b>10:20 – 10:50</b>	<b>BREAK</b>	coffee, tea, light snacks
<b>10:50 – 11:10</b>	<b>TALK:</b> Correctness Challenges in HPC and ML	<i>Harvey Dam, Ganesh Gopalakrishnan</i> Department of Computer Science, University of Utah
<b>11:10 – 11:30</b>	<b>TALK:</b> Reliable and reproducible Earth System Model data analysis with ESMValTool	<i>Valeriu Predoi*</i> NCAS-CMS, University of Reading
<b>11:30 – 11:50</b>	<b>TALK:</b> Testing approach for porting legacy 4-mode Modal Aerosol Model (MAM4) to C++/Kokkos	<i>Balwinder Singh</i> Atmospheric Sciences and Global Change Division, Pacific Northwest National Laboratory
<b>11:50 – 12:10</b>	<b>TALK:</b> Verification of the ICON model with the GT4Py dycore - challenges and insights	<i>Abishek Gopal*</i> Institute for Atmospheric and Climate Science, ETH Zurich
<b>12:10 – 1:10</b>	<b>LUNCH</b>	Mesa Lab cafeteria (Included with registration)
<b>1:10 – 2:10</b>	<b>KEYNOTE:</b> Earth system models of the future	<i>Peter Dueben*</i> Earth System Modelling Section, European Centre for Medium Range Weather Forecasts (ECMWF)
<b>2:10 – 2:30</b>	<b>TALK:</b> A Theory of Scientific Programming Efficacy	<i>Michael Coblenz</i> Department of Computer Science, UC San Diego
<b>2:30 – 2:50</b>	<b>TALK:</b> An overview of the MOM6 development cycle	<i>Marshall Ward*</i> Geophysical Fluid Dynamics Lab, NOAA
<b>2:50 – 3:20</b>	<b>BREAK</b>	Beverages and light snacks
<b>3:20 – 3:40</b>	<b>TALK:</b> Challenges in Ensuring Reproducibility for Machine Learning Weather Model Training and Deployment	<i>David John Gagne</i> Computational and Information Systems Lab, NCAR
<b>3:40 – 4:00</b>	<b>TALK:</b> METplus: The Long and Winding Road to Unified Verification	<i>Tara Jensen*</i> Research Applications Lab, NCAR
<b>4:00 – 4:20</b>	<b>TALK:</b> Unit Testing NCEPLIBS	<i>Edward Hartnett</i> CIRES/NOAA
<b>4:20 – 5:00</b>	<b>OPEN DISCUSSION</b>	All

\*Indicates speaker is remote

<b>Fri. Nov. 10</b>		
<b>8:30 – 9:30</b>	<b>KEYNOTE:</b> Lightweight Formal Methods: The What, Why, and How	<i>John Baugh*</i> Civil Engineering and Operations Research, North Carolina State University
<b>9:30 – 9:50</b>	<b>TALK:</b> What could the next 30 years of software verification in climate science look like?	<i>Dominic Orchard*</i> Department of Computer Science and Technology, University of Cambridge and School of Computing, University of Kent
<b>9:50 – 10:10</b>	<b>TALK:</b> Parallel reproducibility of the SHYFEM-MPI model	<i>Francesco Carere*</i> Euro Mediterranean Center on Climate Change Foundation (CMCC Foundation)
<b>10:10 – 10:40</b>	<b>BREAK</b>	coffee, tea, light snacks
<b>10:40– 11:40</b>	<b>KEYNOTE:</b> Contained Chaos: Quality Assurance for the Community Earth System Model	<i>Dorit Hammerling</i> Applied Mathematics and Statistics, Colorado School of Mines
<b>11:40 – 12:00</b>	<b>TALK:</b> Methods and Tools for the Application of UFACT to New Climate Models	<i>Teo Price-Broncucia</i> Department of Computer Science, University of Colorado Boulder
<b>12:00 – 12:20</b>	<b>TALK:</b> Ensure the correctness and reproducibility in UFS Weather Model CI	<i>Jun Wang</i> NOAA NWS/EMC
<b>12:20 – 1:20</b>	<b>LUNCH</b>	Mesa Lab cafeteria (Included with registration)
<b>1:20 – 1:40</b>	<b>TALK:</b> Towards Ensuring Statistical Climate Reproducibility of Earth System Models in the Exascale Age	<i>Salil Mahajin</i> Computational Earth Sciences Group, Oak Ridge National Laboratory
<b>1:40 – 2:00</b>	<b>TALK:</b> Improvements in Reproducibility Testing Through False Discovery Rate Correction	Michael Kelleher Computational Earth Sciences Group, Oak Ridge National Laboratory
<b>2:00 – 3:30</b>	<b>PANEL:</b> Correctness and verification across platforms	<u>Moderator:</u> <i>Brian Dobbins</i> , NCAR <u>Panelists:</u> - <i>Ilene Carpenter</i> , Hewlett Packard Enterprise - <i>Karsten Peters-von Gehlen</i> , Deutsches Klimarechenzentrum GmbH (DKRZ) - <i>Ganesh Gopalakrishnan</i> , University of Utah - <i>Aaron Donahue</i> , Livermore National Laboratory
<b>3:30 – 4:00</b>	<b>BREAK</b>	Beverages and light snacks
<b>4:00– 5:00</b>	<b>CLOSING DISCUSSION</b>	All

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