

Annual Science Symposium • Friday, May 13 • University Memorial Center

Rendezvous2022

Celebrate outstanding science with your CIRES colleagues!

The CIRES Members' Council is pleased to announce the 17th annual CIRES Rendezvous. This institute-wide symposium spotlights the depth, breadth, and quality of the pacesetter science being done at CIRES. We hope to encourage collaborations that might result in new interdisciplinary research, and to facilitate connections among our many innovative scientists, science support staff, and administrative staff. The event includes an entire afternoon devoted to science and poster presentations by CIRES members.

AGENDA

Please allow some time to check-in before the festivities begin.

10:00AM - 11:30AM
POSTER SETUP

11:00AM - 11:25AM
CHECK IN

11:30 - 1:30PM
LUNCHEON / STATE OF THE INSTITUTE ADDRESS & AWARDS

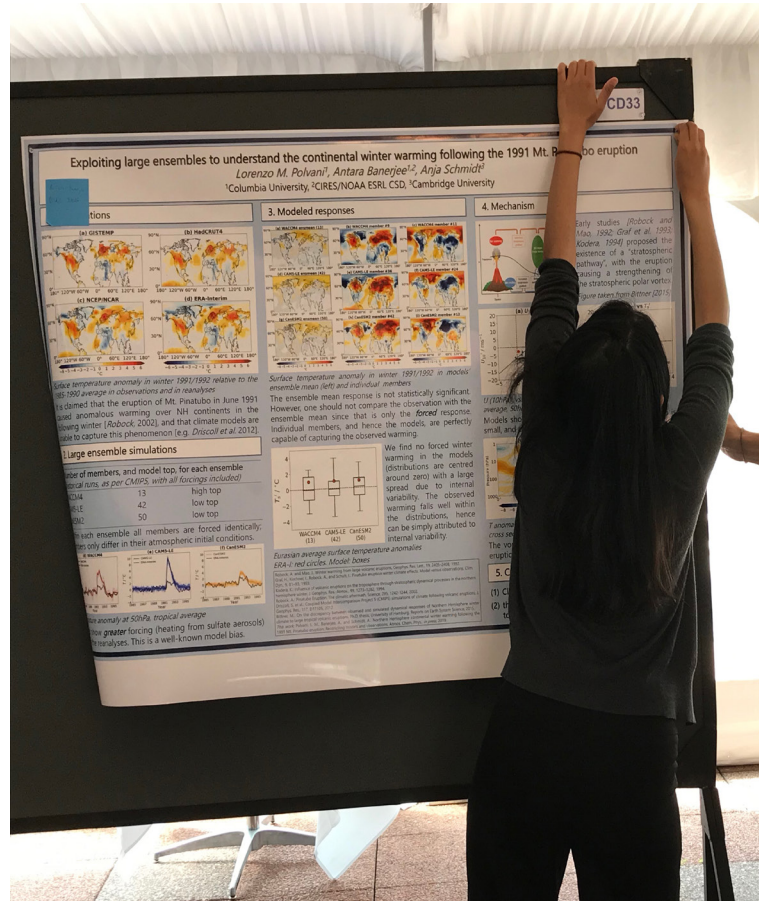
For those joining us virtually (see link below), please stay tuned between 12 & 12:15 for the welcome and start of Waleed's presentation. The start time is dependent upon the lunch service and how quickly people get through the line.

<https://www.youtube.com/watch?v=Oh4gVEWu7q8>

1:30 - 4:30PM
POSTER SESSION

Poster titles, abstracts and PDFs plus all other Rendezvous details can be found here:

<https://ciresevents.colorado.edu/rendezvous/>



Hosted by



CIRES MEMBERS' COUNCIL

cires-cmc@lists.colorado.edu



From the Director



Dear Colleagues,

Welcome to the annual CIRES Rendezvous!

It has been three years since our last in-person Rendezvous, and I just want to say that I am delighted that we are able to see one another, look each other in the eye, and interact face-to-face. I think a notable difference this year, however, might be that our faces won't be quite as close together as in past years, and many of those faces will be masked. What matters is that we are able to come together and celebrate.

And we have so much to celebrate, from the hard work of our colleagues, to our wonderful scientific achievements, to simply overcoming the challenges of the last two years with great success. I am so very proud of the work you all do here at CIRES, and I feel so very fortunate to be the director of such a strong scientific organization with such great character.

We had another very successful year on the funding front: With awards totaling \$71M in the first 3/4 of 2022, our research productivity was, once again, outstanding. That is 4 percent higher than the same period in FY21. You will be able to sample the breadth and depth of our research as you visit the posters this afternoon, and I expect that you – as I do every year – will leave this Rendezvous with a renewed sense of just how truly incredible a place CIRES is, where we do research that not only advances knowledge, but also serves society by helping us better understand the world in which we live.

We do this, in large part, through our partnership with NOAA as we work to fulfill the NOAA mission. And we do this through an impressive set of individual and team investigations into the processes that shaped our planet's past, are responsible for our planet's present, and are fundamental to determining our planet's future. Our research is not only of the highest quality; it is of the utmost importance.

Whether you are a world-renowned scientist working at the forefront of environmental sciences, or you are a support person who works to make it all happen, you play a very important part in the fulfillment of our important mission: to understand our changing environment and the human relationship with it.

I feel so lucky to be in the position of promoting the wonderful work you do and helping others – from grade school kids to influential policy-makers – appreciate the value of our collective efforts. Thank you for all you have done, for your perseverance over the last few years, your commitment to our important mission and to each other, and most of all, for creating an environment in which excellent science is performed and its meaning is realized. I am grateful for the privilege of serving as director of this outstanding institute, and I am grateful to all of you for all you give to CIRES.

Thank you.

A handwritten signature in blue ink, appearing to read 'Waleed', written over a light blue horizontal line.

Waleed Abdalati, CIRES Director

SERVICE through April 30, 2022

5 Years

Christopher Amante	Thomas Falkowski	Xin Lan	Raffaele Montuoro	Michael Toy
Bianca Baier	Sherrie Fredrick	Michael Leon	Elizabeth Ossowski	Xingji Wang
Hazel Bain	Edward Hartnett	Zhuxiao Li	Mariusz Pagowski	Troy Williams
Janice Bytheway	Jennifer Henderson	LuAnn Line	Jay Patel	Michael Willis
Marcos Carvalho	Christian Herrera	Megan Littrell	Derek Price	Suneng Zhuo
Andrew Clarke	Noor Johnson	Matthew Martinsen	Eric Schnepf	Michael Zucker
Matthew Druckenmiller	Evan Kalina	Laura Melling	Trey Stafford	
Benet Duncan	Svetlana Karol	Justin Minear	Rebecca Stossmeister	

10 Years

Jonathan Darnel
Jon Davis
Gijs de Boer
Amy FitzGerrell
Todd Johnston
Luis Lopez Espinosa
Janet Machol
William Rowland
Sandra Starkweather
Hannah Wilcox
Pamela Wyatt

15 Years

Martin Aubrey
Kelly Carignan
Shari Fox
Jonathan Kovarik
Maria Siso
Scott Stierle
Houjun Wang

20 Years

Jennifer Bell
Joost de Gouw
Lucia Harrop
Amanda Leon
Ami Nacu-Schmidt
Matthew Savoie
David Stone
Richard Tisinai

25 Years

Claire Granier
Roy Miller
Jonathan Neuman
Julienne Stroeve
Susan Sullivan

30 Years

Sergey Matrosov
Thomas Mefford
Matthew Newman
Ola Persson
Catherine Smith
Margaret Tolbert

35 Years

Jon Eischeid
Nancy Regnier
Emily Verplanck

PROMOTIONS

Associate Scientist II

Nir Boneh	Alexander Kirst
Roberto Gonzalez-Pita	Rudolf Klucik
Matthew Green	Lee Pappas
Jonathan Hamilton	Caihong Vanderburgh
Christopher Henson	Lindsey Wright

Research Scientist II

Jeffrey Duda	Jun Wang
Pamela Rickly	Brandon Wolding
Jordan Schnell	Rochelle Worsnop
Jocelyn Turnbull	

Associate Scientist III

Kathryn Boyd	Adam Kubaryk
Taylor Devlin	Glen McConville
Candida Dewes	Christine Okochi
Sherrie Fredrick	Britt-Anne Parker
Maria Gehne	Mary Woloszyn
Emiel Hall	Stephanie Wong
Kevin Hallock	Michael Zucker
Marin Klinger	

PROMOTIONS continue on next page

PROMOTIONS continued from previous page

Research Scientist III

John Albers
Athanasios Boudouridis
Enrico Camporeale
Douglas Day
Guoqing Ge
Lei Hu
Andrew Jacobson
Gerard Ketefian
Twila Moon
Hagen Telg
Li Zhang

Senior Associate Scientist

Charles Anderson
Christopher Bond
Kara Csibrik
Agnieszka Gautier
Edward Hartnett
Shannon Leslie
Megan Littrell
Michael Rabellino
Matthew Savoie
Jesse Varner
Elizabeth Wehe
Sonja Wolter

Senior Research Scientist

Ravan Ahmadov
Gijs de Boer
Shari Fox
Brian Kress
Janet Machol
Sandra Starkweather

Administrative Associate II

Jasmine Moore
Claire Waugh

Administrative Associate III

Marcos Carvalho
Nicole Joy
Dawn Williams

Senior Administrative Associate

Anna Fudale
Xingji Wang

AWARDS



CIRES scientists are often integral to NOAA award-winning science and engineering teams but cannot be given certain federal awards, such as the prestigious Department of Commerce Gold, Silver, and Bronze Medals. The CIRES Director recognizes the extraordinary achievements of CIRES scientists working in partnership with federal colleagues.

CIRES Bronze Medals

Haiqin Li

Stuart McKeen

Raffaele Montuoro

Li (Kate) Zhang

For the development of the Global Ensemble Forecast System - Aerosols (GEFS-Aerosols) model to support air quality alerts and visibility forecasts.

Eric James

Tatiana G. Smirnov

For improving lake-effect snow and ice forecasts through a rapid transition of an innovative coupling of weather and coastal hydrodynamic models.

Eric Schnepf

For successful transition and award of a \$553 million High Performance Computing Integrator contract three months ahead of schedule with no protests.

Antonietta Capotondi

Gijs de Boer

Ola Persson

Matthew Shupe

Amy Solomon

For the development of a fully coupled, ocean-ice-atmosphere model that delivers daily, 0-10 day, sea ice forecast guidance to the NWS Alaska Region.

Edward Gille

For implementing a repeatable process to certify scientific data services as trusted sources of information to the international community.

David Neufeld

For implementing an enterprise system to efficiently ingest environmental data into the NOAA Archive for the Nation to use – now and in the future.

AWARDS

CIRES Administrator Plaque

For completion of the High-Resolution Rapid Refresh weather model project that improves forecasts and warnings for high-impact weather events.

Ravan Ahmadov
Hannah Barnes
Jeff Duda
Jason M. English

Guoqing Ge
Jeffrey Hamilton
Siwei He
Eric James

William Moninger
Tatiana G. Smirnova
Molly Smith
Michael Toy

Samuel Trahan
Hongli Wang

CIRES Outstanding Performance Awards: Science

CRITERIA 1: Development of new scientific, engineering and/or software tools or models directly resulting in novel research valuable to CIRES and the wider scientific community.

CRITERIA 2: Uncommon initiative, resourcefulness, and/or scientific creativity conducting research with potential to expand or change the direction of a particular field or discipline.

CRITERIA 3: Participation in collaborative and/or multidisciplinary research that engages a broader cross-section than the nominee's typical scientific or engineering community.

The OPA committee has selected these winners in the Science category:

Rochelle Worsnop

NOAA'S PHYSICAL SCIENCES
LABORATORY

Rochelle Worsnop did outstanding work on the scientific development, demonstration, and technology transfer of a one- to two-week-out forecast of fire weather potential—the agency's first. Worsnop's contributions were pivotal in the creation of the product, and reflect close collaboration with stakeholders, state-of-the-science methodologies documented in high-quality peer-reviewed articles. Her personal commitment to helping NOAA's Climate Prediction Center produce novel operational guidance for this important, high-impact weather phenomenon serves both scientists and the general public.

Mike Hobbins

NOAA'S PHYSICAL SCIENCES
LABORATORY

Michael Hobbins is a leader and innovator in drought research—he led the team development and operationalization of the Evaporative Demand Drought Index (EDDI), the application of novel products like EDDI for improving famine early warning, and more recent strides in improving our understanding of flash drought and its indicators. Hobbins brings outstanding scientific focus which stems from a fundamental passion for improving drought and famine early warning. The most visible and mature example of Hobbins' work is EDDI, and more recently, he has turned his focus to flash drought—with national and international collaborators, Hobbins is pioneering our understanding of this phenomenon.

Zhe Peng

CU BOULDER DEPARTMENT OF
CHEMISTRY

Zhe Peng is a world leader and innovator in atmospheric chemistry research who quickly pivoted during the COVID-19 pandemic to apply his aerosol expertise to airborne virus transmission. Peng has made significant global contributions in that area, including work on a public "airborne transmission estimator tool" used by thousands around the world, and a recent paper demonstrating that COVID superspreading is dominated by shared-room airborne transmission (the most impactful paper ever in the journal *Environmental Science & Technology*, according to Altmetric). Scientists and citizens alike benefited immensely from his work: his models and software tools are available online for free, to both spur continuing research and inform the public of their own COVID risk.

CIRES Outstanding Performance Awards: Service

CRITERIA 1: Implementation of a creative or innovative idea, device, process, or system that aids in research, teaching, or outreach at CIRES.

CRITERIA 2: Development or improvement of a service that increases the efficiency, quality, or visibility of scientific research or outreach.

CRITERIA 3: Providing a service that promotes or inspires excellence and dedication to research performed at CIRES or in the wider community.

The OPA committee has selected these winners in the Service category:

Kevin Beam, Michael Brandt, Daniel Crumly, Matt Fisher, Agnieszka Gautier, Jonathan Kovarik, Audrey Payne, Matt Savoie, Trey Stafford, and Troy Williams

NSIDC

A team of science writers, software developers, and operations technicians at the National Snow and Ice Data Center (NSIDC) has worked tirelessly to communicate the importance of the cryosphere to a wide range of audiences. Through a combination of world-class science writing, user interface design, and data support, they have collectively communicated—both to the scientific community and the general public—how the cryosphere is changing and why it matters. Products include the Arctic Sea Ice News & Analysis (ASINA) and Greenland Ice Sheet Today (GT) analysis sites, interactive tools: Charctic Interactive Sea Ice Graph, Sea Ice Analysis Tool, Sea Ice Spatial Comparison tool, and Greenland Surface Melt Extent Interactive Chart.

Veronica Martinez

NOAA'S NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION

Veronica Martinez played a pivotal role in a data rescue project that preserves environmental data collected by the agency's fleet of research vessels—data that are priceless for documenting our changing oceans and seafloor. All other efforts to rescue this data in recent decades have failed. Martinez engaged ship technicians and scientists in the field and sparked interdisciplinary conversations, training, and procedural overhauls to rescue data that would have otherwise have been stranded shipboard and lost. The NOAA Office of Marine and Air Operations Data Rescue Project ensures sustainable data access for scientists by rescuing all existing data on all NOAA vessels as well as developing a pipeline to ensure future data are archived.

Katie Boyd, Gina Fiorile, Alicia Christensen, Naomi Elaine Ochwat, Casey Lea Marsh, Daniela Pennycook

CIRES EDUCATION & OUTREACH

The Climate Literacy and Energy Awareness Network (CLEAN) team from CIRES Education & Outreach has gone above and beyond in their work to promote scientifically accurate educational materials around climate and has grown the CLEAN portal to serve as the national go-to resource for teachers and educators. Because of this team's work, CIRES is viewed as one of the national frontline leaders in climate education. With 68,000+ website visits per month and wide syndication of materials, CLEAN enables teaching climate topics for a massive audience. CLEAN provides easy and impactful opportunities for CIRES and NOAA scientists to contribute to improving climate education resources and allows scientists to increase their skills and awareness around teaching climate.

OFFICERS



Hazel M. Bain
MENTORSHIP VICE-CHAIR
hazel.bain@noaa.gov



Janice Bytheway
MENTORSHIP CHAIR
janice.bytheway@noaa.gov



Ryan Cassotto
EXECUTIVE MEETING REP
ryan.cassotto@colorado.edu



Agnieszka Gautier
SECRETARY
agnieszka.gautier@colorado.edu



Molly Hardman
VICE CHAIR
molly.hardman@colorado.edu



Eric James
MEMBERSHIP CHAIR
eric.james@noaa.gov



Gabrielle Petron
CHAIR
Gabrielle.Petron@noaa.gov



Yelena Pichugina
FELLOWS MEETING REPRESENTATIVE
Yelena.Pichugina@noaa.gov



Meg Tilton
RENDEZVOUS VICE-CHAIR
margaret.tilton@colorado.edu



Man Zhang
RENDEZVOUS VICE-CHAIR
Man.Zhang@noaa.gov



Mistia Zuckerman
EXECUTIVE MEETING REP
mistia.zuckerman@colorado.edu

MEMBERS



Chuck Anderson
charles.d.anderson@colorado.edu



Samuel Califf
califf@Colorado.EDU



Matthew Gentry
Matthew.Gentry@colorado.edu



Tyler McIntosh
Tyler.L.McIntosh@colorado.edu



Chesley McColl
chesley.mccoll@colorado.edu



Daniela Pennycook
Daniela.Pennycook@colorado.edu



Jimena Ugaz
jimena.ugaz@colorado.edu



Siyuan Wang
Siyuan.Wang@Colorado.EDU

Rendezvous is organized each year by the **CIRC Members Council (CMC)**. We represent the interests of all CIRC members with respect to CIRC governance, organizational direction, and the day-to-day workplace environment. As a representative group made up of CIRC members, we are tasked with the following:

- Representing the concerns of the CIRC Membership by bringing issues to the attention of the CIRC administration;
- Working to improve the lines of communication within and between all CIRC units;
- Providing a means of Member participation in CIRC governance and a voice on committees and working groups which form the core of that governance;
- Contributing to the process which determines CIRC's research direction and areas of research;
- Fostering a positive workplace environment and Members' connection with CIRC by facilitating Members' understanding of their roles within CIRC.

The CIRC Members Council provides the opportunity for service as well as career enhancement, benefiting representatives and constituents alike.

circ.colorado.edu/about/institutional-programs/circ-members-council



Use your device to find poster locations and/or abstracts:
<https://ciresevents.colorado.edu/rendezvous/>

UMC Terrace Main Tent

CRYOSPHERIC AND POLAR
PROCESSES

ENV. OBSERVATIONS,
MODELING, FORECASTING

SOLID EARTH SCIENCES

WESTERN WATER
ASSESSMENT

ECOSYSTEM SCIENCE

ENVIRONMENTAL
CHEMISTRY

UMC MAIN ENTRANCE

	19	22		2	3
17	20		24	1	4
16	21	20	25	17	5
15	22	19	26	16	6
14	23	18	27	15	7
13	24	17	28		8
	25	16	29		9
10	26	15	30	12	10
11	27	14		11	1
9	28	13	32	10	2
8	29	12	33	9	3
7	30	11	34	8	
6	31	10	35	7	
5		9	36	6	6
4	1	8	37	5	1
3	2	7	38	4	2
2	3	6		3	3
1	4	5	1	2	4

SNACKS

CASH
BAR
(CREDIT
CARDS
ONLY)

Extension Tent (see next page)

Main Tent (see previous page)

UMC Terrace Extension Tent

WEATHER AND CLIMATE
DYNAMICS

1	2	3	4	5	6	7	8
16	15	14		12	11	10	9

17	18	19	20		22	23	24
	31	30	29	28	27	26	25



Use your device to find
poster locations and/or
abstracts:

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Aspen Rooms

ADMINISTRATION

EDUCATION & OUTREACH

2	3
1	4
	5
7	6
6	7
5	8
2	9*
1	

CASH
BAR
(CREDIT
CARDS
ONLY)

SNACKS

*GREEN SCREEN
(EO 9)