



**THE INSTITUTE**  
FOR UNDERGROUND SCIENCE  
AT SURF

# CETUP\* 2026



CELEBRATING  
**CETUP\***

Center for Theoretical  
Underground Physics  
and Related Areas

OF COLLABORATIVE RESEARCH



# Introductions

- Staff
- Organizing Committee
- Workshop Attendees



# Celebrating 10 Years of CETUP\*

- Share Milestones
- Time Capsule
- Timeline Graphic
- Your Stories
- Next 10 Years



# Celebrating 10 Years of CETUP\*



For the **Time Capsule**, consider contributing items such as:

- Photos from past or current CETUP\* workshops
- Copies of publications or journal articles connected to CETUP\* collaborations
- Workshop schedules, agendas, name badges, or group photos
- News articles featuring CETUP\* or related scientific discoveries
- A short letter to future CETUP\* participants describing your hopes for the field
- A commemorative item from this year's workshop
- Small mementos that capture the spirit of CETUP\*



# Celebrating 10 Years of CETUP\*



To contribute, please submit your memory on the  
CETUP\* **Indico website**.

We would love to hear about:

- A memorable moment or experience (photos or articles welcome)
- The people, collaborations, or environment that made it meaningful
- How it influenced your research, career, or perspective
- Any outcomes (publications, partnerships, new directions)
- The broader impact of your work connected to CETUP\*



## LZ dark matter experiment sets a world's best and spots neutrinos from the sun's core



[Download Image](#)

The LUX-ZEPLIN main detector in a surface lab before installation underground. (Photo: Matthew Kapust/Sanford Underground Research Facility)

The theoretical work developed at CETUP\* has been integral in motivating and interpreting important and timely experiments. An example is the recent LZ detection of solar neutrinos via coherent scattering, which provides a novel window into neutrino physics and astrophysics. CETUP\* is crucial to understanding the importance of such results, which represents the culmination of over 50 years of experimental effort.

Louis Strigari, Texas A&M

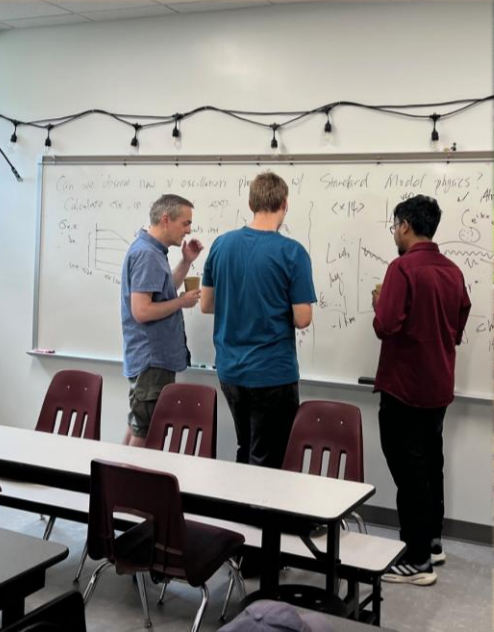




Trip to the SURF underground laboratory in 2023: A bunch of happy theorists finally seeing where the experiment they make predictions for is going to live.

Julie Gehrlein  
Colorado State University







# THE INSTITUTE

FOR UNDERGROUND SCIENCE  
AT SURF

**Our vision** is to create a dynamic intersection of KNOWLEDGE, PEOPLE, and PLACE, dedicated to building an unparalleled intellectual community and serving as a world-leading center for underground science and technology.



Build Intellectual Community



Foster Interdisciplinary Collaboration



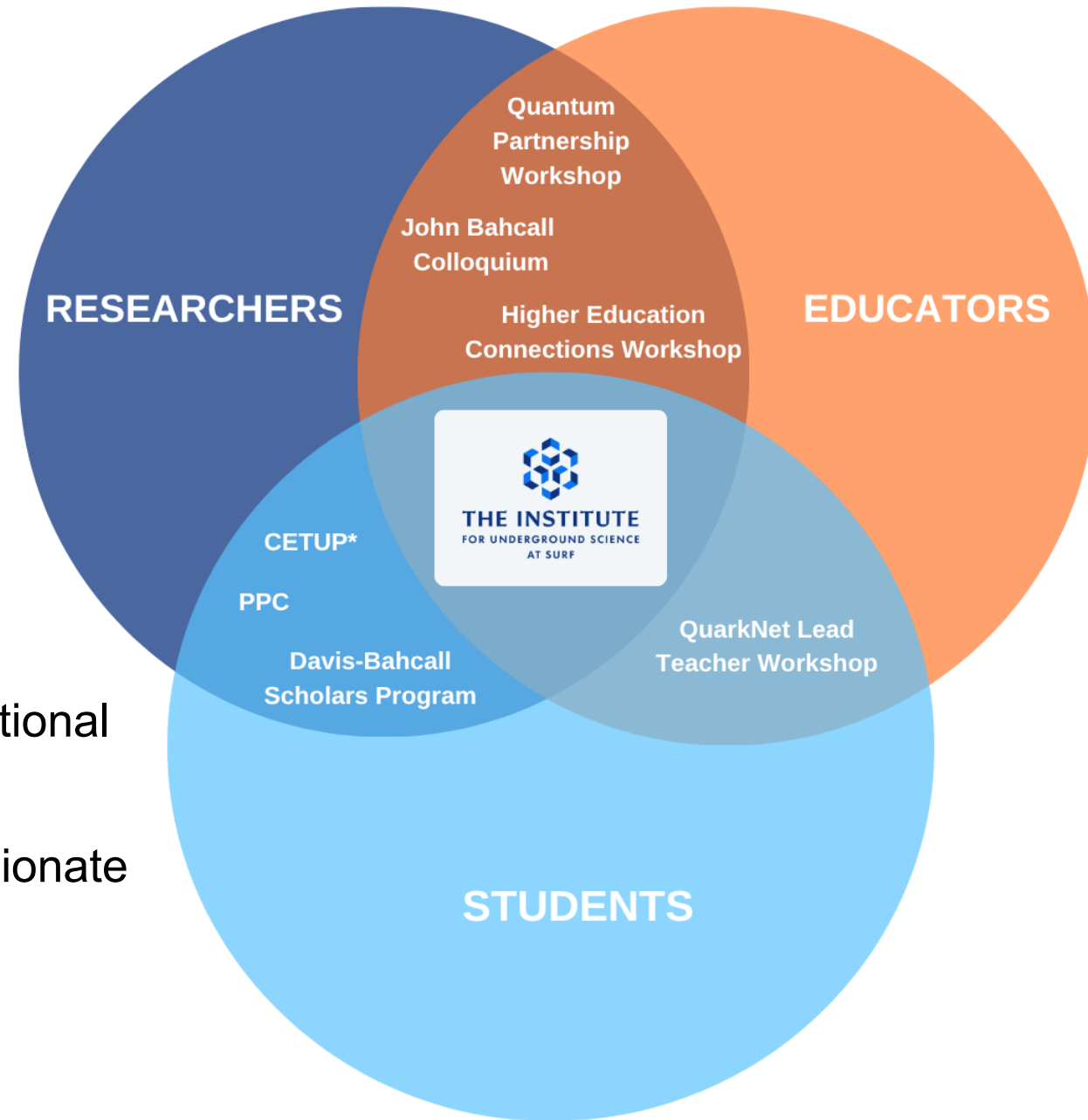
Construct a Path for Future Generations



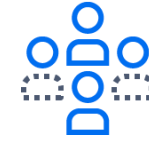
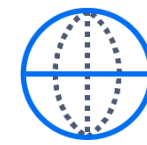
Expand Educational Opportunities



Establish Passionate Partnerships



# Programmatic Impact & Global Intellectual Community



**The Institute for Underground Science** delivers immersive, high-impact programs that connect people, places, ideas, and disciplines. These programs advance research, strengthen collaboration, and build a global intellectual community.

## Resources for Scientific Communities

Recorded Talks & Presentation Archive

Workshop Materials & Proceedings

Digital Scientific Resource Hub

## Support for Early-Career Scientists

Mentorship

Career & Professional Development

Research Engagement

## Connect Underground Science Communities

John Bahcall Colloquium

CETUP\*

Quantum Partnership

Higher Ed Connections

Davis-Bahcall Scholars

## Support for Development of Future Experiments

Scientific Planning

Research Collaboration

Strategic Partnerships



# CETUP\* Dark Matter: Week 2



**Meals**



**Catered  
Lunch  
Provided  
Weekdays**



**Transportation**



**Carpool  
and  
Ride Share  
or Taxi  
(Indico Tab)**



**Communication**



**Staff or  
Organizing  
Committee  
Member**



**Middle School**



**8:00–5:00 p.m.  
weekdays  
(side entrance)  
+  
Elevator**



# CETUP\* Dark Matter: Week 2



**Call for  
Abstracts**



**Talk Spots  
Available**



**Workshop  
Announcements**



**Indico and  
Slack**



**Community  
Outreach**



**Sign up to  
Volunteer**



**Dining  
+  
Tourism  
and Other  
Resources**



# CETUP\* Dark Matter: Week 2

**Monday** – Welcome! Talks and Collaboration

**Tuesday** – Underground Tour (shuttle pick up at 7:30 a.m.)

Lunch at 12:30 p.m.; Talks in afternoon

Public talk at BHSU, Spearfish at 6:00 p.m. (Dr. Chakrabarti)

**Wednesday** – Talks and Collaboration

**Thursday** – Talks and Collaboration; Pub Talks & Trivia @ 5:30 p.m.

**Friday** – Talks and Collaboration

**Saturday** – 4<sup>th</sup> of July Celebrations and Lead's 150<sup>th</sup> Activities



# Connect With Us.

[www.Institute.surf](http://www.Institute.surf)

Stacie Granum  
sgranum@sanfordlab.org  
605-571-2305





**SANFORD  
UNDERGROUND  
RESEARCH  
FACILITY**



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# CETUP\*: 10 Year Milestones



**Milestones**



**Milestones**



**Milestones**



**Milestones**

