

# CIMSS STUDENT WORKSHOP: STEM BEFORE STEM WAS COOL

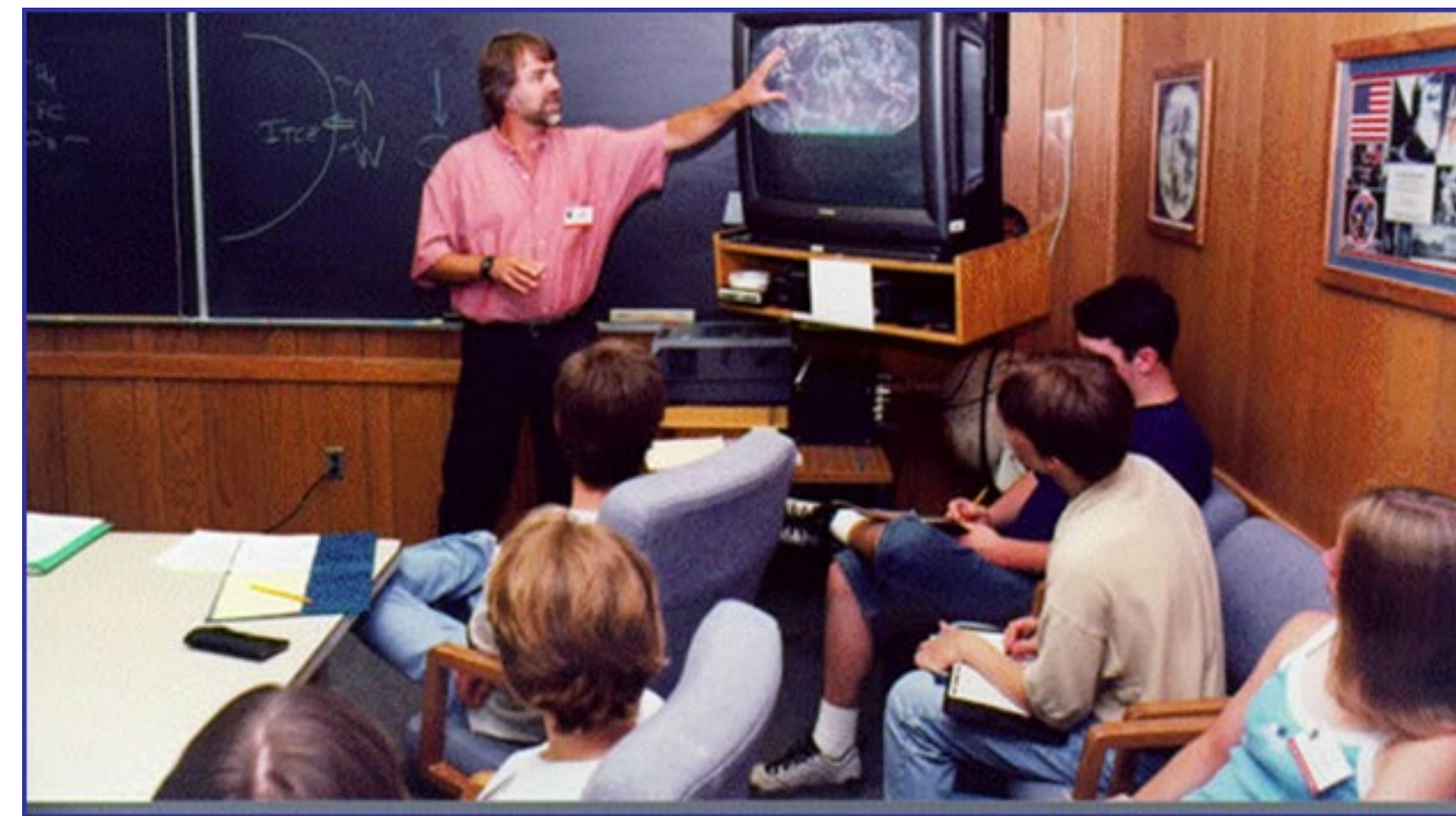
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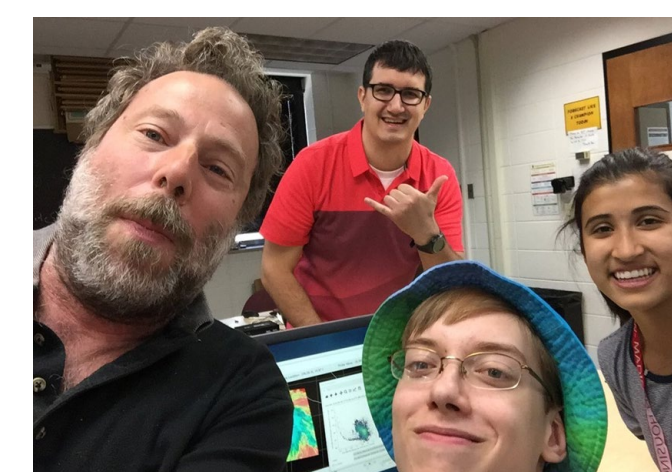
WISCONSIN  
UNIVERSITY OF WISCONSIN-MADISON

## 29-YEAR HISTORY

In 1991, NOAA's Cooperative Institute for Meteorological Satellite Studies (CIMSS) at the University of Wisconsin-Madison launched the first summer workshop in the Atmospheric, Earth, and Space Sciences. The workshop's Curriculum was developed by passionate Earth scientists at CIMSS.



Through "hands-on" experiences with science tools and data, their contributions spread the exciting nature of scientific technology and research with the pre-college education community. To attract the best and brightest students into the field of science, the workshop sought to stimulate young people's interests by demonstrating that science is interesting, exciting, and fun!



Originally funded by grants from Wisconsin Space Grant Consortium, the camp became more self-sustaining, and now tuition covers most costs. Needs-based tuition offsets are provided. Advertising through social media soon saw enrollment expanding across the United States and as far away as Iceland. Recent rosters regularly includes out-of-state high school students and occasional international attendees. For example, 2019 participants hailed from ten different states!



## ACADEMIC TOPICS

### Remote Sensing

- Satellite Meteorology 101
- SIFT (Satellite Information Familiarization Tool)
- Weather and Climate on 3-D Globe

### Earth System Science

#### Meteorology and Climatology

- Lake effect snow study
- Snow, ice or clouds
- Cloud identification hike
- Hurricanes
- Severe Weather
- Climate Change 101
- Greenhouse gases and rooftop experiment



### Astronomy

- Physics Lab (hands-on)
- Planetarium
- Washburn Observatory

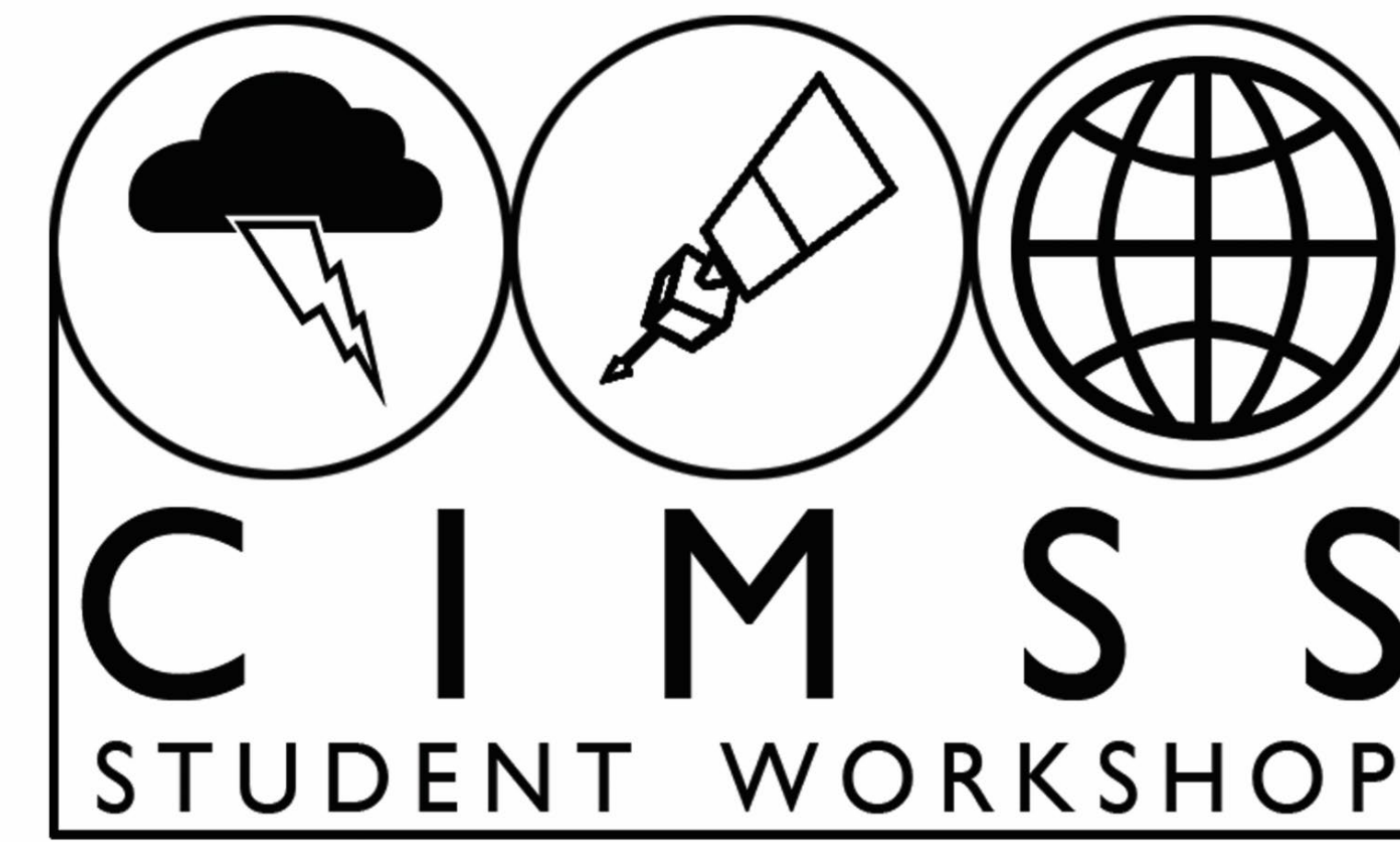


### Limnology

- Limnology of Lake Mendota
- Hands-on experiment – clarity of lake water

## FIELD TRIPS

- Local Television Station
- National Weather Service Office in Sullivan, WI
- Campus Tour
- Wednesday Nite @ the Lab
- Hikes around Picnic Point and Baraboo, WI



### Geology

- Geology Museum Tour
- All-day hike with geology professor through Precambrian rock at Devil's Lake State Park



The workshop is highly interactive, featuring several field trips and numerous hands-on activities.



The CIMSS summer workshop for high school students has established a legacy in the educational community. The majority of participants have gone on to pursue science majors in college and several have since helped with the workshop while attending the UW-Madison. With continued support from NOAA and on-going UW collaborations, the workshop will continue to attract students to science careers for years to come!

<http://cimss.ssec.wisc.edu/studentworkshop/>

2020 Dates = June 21<sup>st</sup> through 25<sup>th</sup>

