

Celebrating 50 Years of Excellence

at the University of Wyoming

1970-2020

Looking back and moving forward to collaboratively build the next half century of excellence in science, mathematics, STEM and transdisciplinary education.

SMTC Speaker Series

KICKING OFF THE SERIES:

February -

Wednesday, February 26 | 12:00- 1:30 PM | Coe Library Room 218

Place and Community-based Education: Using "place" to deepen student learning and engagement.

<u>Greg Smith</u>, Professor Emeritus, Lewis and Clark College; and local panelists Drs. Zach Lebo, Cindy Brock, and Rachael Budowle.

How do we use the place in which we live as a laboratory for learning? What are the assets and issues in this place that present unique opportunities for deep engagement and impact? How have others at the K-12 and university levels incorporated place into their courses and what have been the benefits?

March

Monday, March 2 | 4:10 - 5:00pm | Math Department, AG Room 1030

Squares that Look Round: Transforming Spherical Images

Henry Segerman, Professor of Mathematics, Oklahoma State University

What kinds of post-process transformations make sense for spherical (or "360 degree") photographs and video? We can rotate the sphere, but is there an analogue to zoom in flat video? By using complex numbers to describe the positions of pixels, scaling complex planes, and applying other complex functions, we can "unwrap" a sphere and produce other Escher-like impossible images and video. The code to generate these effects is written in Python, and much of it is available on GitHub.

Monday, March 2 | 6:30-7:30 pm| Engineering Education and Research Building (EERB) Atrium

Artistic mathematics: truth and beauty

Henry Segerman, Professor of Mathematics, Oklahoma State University

How do you make accurate, effective, and beautiful pictures, models, and experiences of mathematical concepts? What makes a visualization compelling? See examples in the medium of 3D printing, as well as some work in virtual reality and spherical video. Learn about the experience of teaching a project-based class on 3D printing for mathematics students.

Save the Dates:

APRIL 2 | Nancy Huntly, Director of Ecology Center and Climate Adaptation Science, Utah State University
Transforming graduate education through interdisciplinary graduate projects: Examples from Climate Adaptation Science (CAS) program, an interdisciplinary graduate specialization

APRIL 10 | Erin Campbell, Wyoming State Geologist and Director of the WSGS Earth Resources and Geologic Hazards in Wyoming, part of the SER Suffrage Series highlighting women

JULY | Art & Environmental Stewardship Community Event: Collaborating, Cleaning, Creating

SEPTEMBER 14 | <u>Jes Thompson</u>, Professor, Northern Michigan University, and Author, America's Largest Classroom: <u>What We Learn from Our National Parks</u>

Book launch: What we can learn from and in our national parks?

OCTOBER 2-4 | SMTC 50th Celebration Weekend

Guided hikes, community events, alumni gathering, dinner and party
Guest speaker Nalini Nadkarni, Professor, Department of Biology, University of Utah; Tree-top canopy ecologist, Barbie-doll designer;

innovator/change-maker in classrooms, community and research

NOVEMBER | Uncovering hidden gems in Laramie: Conversations in the Community

DECEMBER 4 | A thematic recap of 2020 speakers (a cutthroat gingerbread house contest)

Learn more at the **SMTC** website

