## The Cutting Edge of Temperature: Distributed Temperature Measurement in Earth Sciences Principles, Applications, Operation, Data Analysis, and Demonstrations

December 9-10, 2017 USGS Stennis Facility (Near New Orleans before the AGU Fall meeting)



The NSF Centers for Transformative Environmental Monitoring Programs (CTEMPs) will offer a two-day hands-on workshop on the theory, application and analysis of distributed temperature sensing (DTS) for earth sciences. The workshop will accommodate a wide range of practitioners, from those interested in an introduction to the methods, to those wanting to learn state of the art data processing to getting the greatest possible precision from your DTS data. Examples will be taken from the Ross Ice Sheet, the Dead Sea, Atmospheric Turbulence in Colorado, deep rock installations in Nevada, and rivers and lakes around the world. All participants will have the opportunity to work directly with a wide range of DTS instruments, instrument manufacturers and cables designed specifically for environmental sensing. DTS manufacturers, fiber optic cable manufacturers, and CTEMPs staff will lecture and be available for consultation on special issues. Please feel free to bring data sets.

Day 1 (December 9) will introduce the theory of DTS as well as provide hands-on experience with instrument and fiber handling.

Day 2 (December 10) will concentrate on aspects of field installation and data processing (calibration).

## Instructors

<u>John Selker</u> – Oregon State University (<u>John.Selker@OregonState.edu</u>) (for urgent issues: cell 541-829-0137) <u>Scott Tyler</u> – University of Nevada, Reno. (<u>styler@unr.edu</u>)

## Sponsors

<u>CTEMPs</u>, via The National Science Foundation EAR Instrumentation and Facilities Program <u>Oregon State University</u>; <u>University of Nevada Reno</u>

**Participation**: (Limited to 20 participants; by order of registration)

**Registration**: To reserve a space, register <u>here</u>. Questions? Contact Annie Ingersoll (541-737-2041 or <u>Annie Ingersoll@OregonState.edu</u>) Registration is not binding until payment is received.

**Cost:** Participants may register for individual days (\$150/day professionals, \$75/day students) or for the entire workshop (\$200). Light breakfasts, lunches, and light snacks included. Feel free to bring a typical treat from your locale. Please make your checks payable to "Oregon State University" and send them to the attention of Annie Ingersoll at Biological & Ecological Engineering, 116 Gilmore Hall, Corvallis, OR 97331-3906. For wire transfers, please contact Annie for directions. **We cannot accept credit card payments**.

Location: <u>Hydrologic Instrumentation Facility</u>, Building 2101, Stennis Space Center, MS 39529

**Travel:** CTEMPS does not provide transportation to or from the airport. If you will have a car to or from the airport and are able to share a ride with another workshop attendee, please contact <u>annie.ingersoll@oregonstate.edu</u>. **Facility Access and Parkng:** More information will be available soon.

Internet Access: More information will be available soon.



