# Third COSMOS workshop

(COSMOS = COsmic-ray Soil Moisture Observing System)

## Location:

Ventana Resort, Tucson, AZ, USA

#### Dates:

10-11 December 2012: COSMOS workshop

12 December 2012: Introduction to neutron transport modeling

# Background:

COSMOS is a new and promising technology for non-contact hourly soil moisture measurements with a footprint of about 700 m in diameter and 10-50 cm in depth. The first COSMOS workshop (Tucson, AZ, April 2008) was devoted to issues that were deemed necessary to secure funds for the current phase 1 of COSMOS. The second workshop (San Francisco, December 2009) was focused on planning for phase 1 of COSMOS.

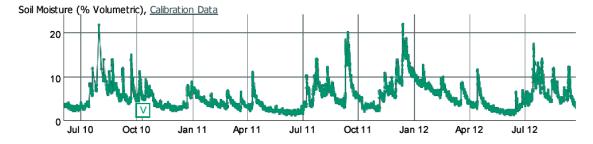


# **Objectives:**

The third COSMOS workshop will focus on (1) progress and challenges in cosmic-ray method development (day 1) and (2) applications and potential applications of cosmic-ray probe to atmospheric sciences, hydrology, ecology and other fields of science (day 2). The main objectives are: a) to assess progress of COSMOS in the past three years and potential for future; b) to share experiences in COSMOS applications; and c) to plan for the future direction of the COSMOS project. The Workshop will consist of invited and contributed oral presentations plus poster presentations (depending on the number of submissions).

The workshop is not only a conference to present research results but also a forum to discuss progress and solve any outstanding problems. Presentations should be prepared with that in mind. All presentations will be timed to allow ample time for discussion.

This will be an exciting gathering of scientists interested in cosmic-ray method and COSMOS applications, industry partners, representatives from other national and international network of surface measurements, and scientists in satellite remote sensing calibration and other fields.



## RSVP:

Please, let us know by 31 October 2012 if you will (or will not) be attending. A response by 15 October 2012 will be most useful for planning purposes.

# Preliminary agenda (as of 23 September 20 12):

# Day 1, all day:

Cosmic-ray method development, principles, field applications and validation, issues and complications, solutions.

## Day 2, morning:

Applications to atmospheric sciences (weather, climate), hydrology (water balance, parameter estimation), ecology (ET, biomass), validation of satellite instruments.

# Day 2, afternoon:

Other issues, future prospects, update on phase 2 of COSMOS, closing remarks.

## Day 3, optional:

Field trip to nearby COSMOS field site and/or Introduction to neutron transport modeling using the MCNPX code.

#### **Accomodations:**

The Loews Ventana Resort

http://www.loewshotels.com/en/Ventana-Canyon-Resort

We have a group rate of \$109+tax per night

(\$90 for government employees). When making a reservation, use code DHWD10, or go directly to our private reservation web page:



## Registration:

There is no formal registration form.

Send an e-mail in lieu of registration to the contact below.

## Contact:

Dr. Marek Zreda
Department of Hydrology and Water Resources
University of Arizona
Tucson, AZ 85721
USA
+1 520-621-4072
marek@hwr.arizona.edu

## **Further information:**

http://cosmos.hwr.arizona.edu/workshop3/workshop3.html