

# CSEG COFFEE TALK

**Title:** The CESM Automated Test System: Unlocking the Door to More Efficient, Robust CESM Development

**Presenters:** Bill Sacks and Jay Shollenberger

**Date:** Friday, 14 March 2014

**Time:** 12:00 - 1:00 (feel free to bring lunch)

**Place:** Mesa Lab – Damon Room

## **Abstract:**

The CSEG Coffee Talks are a set of tutorials and practical talks, showing you tools and techniques for working with CESM more effectively and more productively. The talks are aimed at anyone who develops code for CESM; no advanced knowledge is assumed.

In this inaugural talk in the series, we will teach you how to use the CESM automated test system. This easy-to-use system allows you to repeatedly test your code as you develop it. This will save you time (avoiding the need for setting up and running manual tests of your new code), will allow you to catch bugs sooner, and will help ensure that you haven't broken some piece of the system that you didn't even know about.

## **Specific topics we will cover include:**

- How to run automated tests to ensure that your modified code still compiles, runs and satisfies requirements such as exact restarts, and how to interpret the results of these tests
- How to test code modifications that you expect won't change answers, to ensure that they truly don't change answers
- How to run a large set of tests with a single command, to ensure that your new code hasn't broken any obscure configurations
- Recommended workflows for catching problems early, to prevent the headaches caused by trying to track down bugs that were introduced many months ago

Webcast instructions:

AUDIO – 1-866-740-1260 – Enter Access Code 4971358

VIDEO – Go to [www.readytalk.com](http://www.readytalk.com) under “join a meeting” enter access code 4971358