

Hybrid Simulation Workshop: Welcome to *nees@berkeley*

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nees@berkeley

The George E. Brown, Jr. Network for Earthquake Engineering Simulation



Welcome to *nees@berkeley*!

- ◆ We specialize in hybrid simulation
- ◆ We also do conventional structural tests using:
 - A reconfigurable reaction wall
 - A reconfigurable test frame (REPEAT)
 - An array of actuators
 - A high-channel-count data acquisition system
 - Multiple digital cameras
 - A laser-based geometry scanner
 - Tools for processing and visualizing test data

Purpose of this Workshop

- ◆ Learn about hybrid simulation:
 - Describe the basics
 - Conduct a test
 - Use the OpenSees framework in your research
 - Help you plan to use the *nees@berkeley* equipment site for your research:
 - ◆ ... and help you write a winning 2007 NEES-R proposal involving hybrid simulation

Agenda (Day 1)

9-noon: Hybrid Simulation Basics

10:30-11:30 A view from Boulder

12:30-1:30 Lunch

1-5:30: Hybrid Simulation and OpenSees:
Implementation at *nees@berkeley*

5:30-6:30: Lab tour

7:00-....: Dinner at the Faculty Club

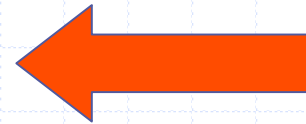
Agenda (Day 2)

8:30-9am Breakfast at *nees@berkeley*

9:00-12:15 Hybrid modeling using OpenSees

12:15-1pm Lunch

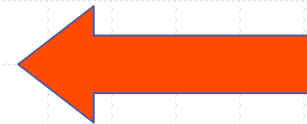
1:00-1:45 First hybrid simulation test



1:45-2:30 OpenSees solution algorithms

2:30-3:15 Digital data and video at *nees@berkeley*

3:30-4:00 Second hybrid simulation test



3:15-5pm Workshop review and conclusion

Thank you!

Development and operation of the nees@berkeley equipment site is sponsored by NSF.

<http://nees.berkeley.edu>

This workshop would not be possible without help from Ms. Nancy Nelson and Ms. Ninh Trinh: thank you!



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