# PROBABILISTIC SEISMIC HAZARDS ANALYSIS (PSHA) 2026

WEDNESDAYS, FRIDAYS, JAN 28 - MAY 15\* | 11:00 AM - 12:30 PM PACIFIC | VIRTUAL

# PART 1 - INTRODUCTION

### Class 1

- Class outline
- Introduction to PSHA concepts

### Class 2

- Introduction to PSHA concepts (cont)
- Probability Review

# Class 3

PSHA Mathematical Framework

### Class 4

Aleatory Variability and Epistemic Uncertainty

### Class 5

PSHA software and tools

# PART 2 - STANDARD PSHA

# Class 6

Seismic Source Characterization: Faults

# Class 7

Seismic Source Characterization: Zones

# Class 8

• Entering SSC logic trees into PSHA software

# Class 9

 Introduction to Ground-Motion Characterization

### Class 10

Entering GMC logoc trees into PSHA software

### Class 11

 Hazard Results, Disaggregation, and Design Spectra

### Class 12

Conditional Mean Spectra and Conditional Spectra

### Class 13

Risk and Risk-Targeted Ground Motion

### Class 14

• What should be included in a PSHA Report

# Part 3 - Ground-Motion Models Class 15

 Median GMM - Scaling from Point-Source Models and constraints from finite-source simulations

# Class 16

- Median GMM Model Complexities
- (regionalization, HW effects, NL site effects)

# Class 17

· Components of Aleatory Variability for GM

# Class 18

Near-Fault Effects (directivity, velocity pulses)

### Class 19

Evaluation of Alternative GMMs (logic trees)

#### Class 20

Secondary Ground-Motion Parameters

### Class 21

 Selection and Modification of Design Time Histories

### Class 22

 Selection and Modification of Design Time Histories

# PART 4 - ADVANCED TOPICS

### Class 23

 Probabilistic Fault Displacement Hazard Analysis (PFDHA)

# Class 24

Non-ergodic PSHA (site)

# Class 25

Non-ergodic PSHA (source and path)

# Class 26

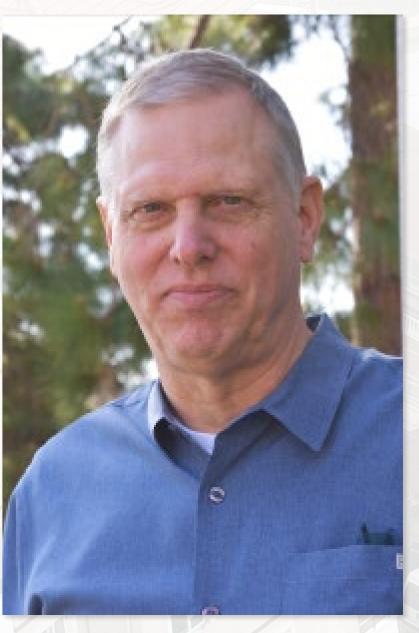
Review

# Class 27

Review

# REGISTER

MEMBERS NONMEMBERS \$2500 \$3000



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\*CLASS MEETS EVERY WEDNESDAY AND FRIDAY EXCEPT FEB 27, MARCH 6, THE WEEK OF MARCH 23, AND APRIL 15.