2012 Yosemite Forum

Sponsored by Resources Management and Science, Yosemite National Park

An interactive lecture series designed to bring evolving knowledge of the Sierra Nevada to the public and the park.

Simulation of Rockfall Trajectories Using Process-based Models

Sandra Melzner, Geological Survey of Austria

Estimating the trajectories of possible future rockfall events is a key component of hazard assessment. Various approaches exist to simulate rockfall runout distances and/or rockfall kinematics, ranging from empirical models to two- and three-dimensional process-based models. Yosemite Valley is an ideal site for model comparison because the large amount of high-quality rockfall data enables a realistic model set-up. Preliminary simulations of the recent rockfall that damaged the Big Oak Flat Road on January 22 will be presented. Such "real world" events provide important field validation for trajectory models and their use in hazard assessment for larger areas.

Sandra Melzner is a geologist with the Department of Engineering Geology at the Geological Survey of Austria, and works in the field of rockfall and landslide hazard assessment.

Tuesday, February 14, 2012
Auditorium, Yosemite Valley
Noon to 1 p.m.

Yosemite Forum is a partnership among:

- Yosemite National Park, Resources Management and Science Division
- USGS, Western Ecological Research Center, Yosemite Field Station
- University of California, Sierra Nevada Research Institute
- The Yosemite Conservancy