



# NATURAL FREQUENCIES

**Carillon Installation  
and Performance**  
in honor of the 100th Anniversary  
of UC Berkeley's Sather Tower

**Tuesday, February 3, 2015**  
**Doe Library Upper Terrace, Berkeley**  
**3 ten-minute live performances**  
**at 6:30 PM, 7:00 PM, and 7:30 PM**

Bell towers have been used for centuries as a medium to effectively convey time, calls to prayer and community events, and warnings about invasions, fires, and floods. Although the latter are rare on the UC Berkeley campus, Sather Tower is located directly above the Hayward Fault Line, where a major earthquake is considered likely in the next 30 years.

This installation and performance includes a unique composition of bells (both recorded and live) and lighting modulated in real time by data from the UC Berkeley seismometer inside the Hayward Fault. The title refers to the response of structures and systems to external forces.

**Carillonists: Jeff Davis and Tiffany Ng • Concept: Ken Goldberg, Ed Campion, Greg Niemeyer, and Perrin Meyer**  
**Music Composition: Ed Campion • Lighting Design: Greg Niemeyer and Jeff Lubow • Sound Design: Ed Campion and Jeff Lubow • Seismic System Design: Sanjay Krishnan • Event Design and Documentation: Amy Hamaoui , LaDawn Duvall, Colin Ho, Alex Turney • Special thanks to Meyer Sound for event audio and lighting, Richard Allen, Doug Neuhouser, and Peggy Hellweg of the UC Berkeley Seismological Laboratory for the live data feed, the UC Berkeley Department of Music, the Center for New Music and Audio Technologies (CNMAT), the University of California Berkeley Libraries, and the Berkeley Center for New Media (BCNM).**