

# Earthquake Early Warning System Workshop

4 - 6 March 2015

University of Chile and University of California

**Centro Sismológico Nacional**  
**Facultad de Ciencias Físicas y Matemáticas**  
**Universidad de Chile**

## **Wednesday 4 March**

### Opening Session

- 9:00      Welcome  
            Opening words  
            **Sergio Barrientos**, Director, Centro Sismológico Nacional, Universidad de Chile  
            **Richard Allen**, Director, Berkeley Seismological Laboratory, University of California, Berkeley  
            **Ricardo Toro Tassara**, Director  
            Oficina Nacional de Emergencia del Ministerio del Interior y Seguridad Pública  
            **Patricio Aceituno Gutiérrez**, Dean,  
            Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile

### Seismic and Geodetic Monitoring: Real Time Earthquake Products

- 9:30      Introduction to the U.C. Berkeley's Berkeley Seismological Laboratory (BSL) and Department of Earth and Planetary Science  
            **Richard Allen**, University of California Berkeley
- 10:30      Seismic and geodetic systems at the BSL and in the California Integrated Seismic Network,  
            **Peggy Hellweg**, University of California Berkeley
- 11:00      Break
- 11:30      Chilean Seismic System  
            **Sergio Barrientos**, Universidad de Chile
- 12:15      Chilean Geodetic System  
            **Juan Carlos Báez**, Universidad de Chile
- 13:00      Lunch
- 14:30      Instrumentation requirements for high quality real time earthquake information products  
            **Peggy Hellweg**, University of California Berkeley
- 15:30      GNSS system in use at Potsdam: GITWES, IPOC and real time applications  
            **Mathias Fritsche**, GeoForschungsZentrum Potsdam

16:30 Break

17:00 Moment tensors and finite faults, including grid MT  
**Avinash Nayak**, University of California Berkeley

17:30 Real time finite fault processing in California  
**Diego Melgar**, University of California Berkeley

**Thursday 5 March, a.m. - EEW systems**

9:00 The BSL's Earthquake Early Warning Algorithms: ElarmS and GlarmS  
**Richard Allen**, University of California Berkeley

9:45 System calibration, operation and robustness. ElarmS review tools, California prototype production system design  
**Ivan Henson**, University of California Berkeley

10:15 Implementing prototype systems in two regions of Chile  
**Felipe Leyton/Sebastián Riquelme** Universidad de Chile

11:00 Break

11:30 Research Topics and Discussion  
**Sergio Ruiz** - Scaling of amplitude and energy early warning parameters for Iquique, Northern Chile: Implications for future large subduction earthquakes  
**Diego Melgar** - Finite faults and tsunamis  
**Richard Allen** - Using cell phones

13:00 Lunch

Afternoon visit to SHOA (Tsunami Warning System) in Valparaíso

**Friday 6 March**

9:00 **Discussion of** Physical Infrastructure for EEW for Chile (seismic and geodetic spacing, data communications, benefits of underwater cabled system) and Continuation of research questions and general discussion

11:00 Closing session

11:30 Visit to the Early Warning Center (CAT) of the Oficina Nacional de Emergencia

The Workshop on Earthquake Early Warning Systems will take place in the Conference room on the 8<sup>th</sup> floor of the Central Tower of the Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile, Beauchef 850, Santiago.

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