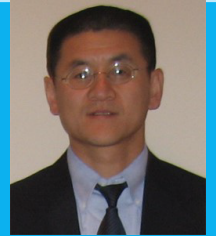




LSGI Distinguished Lecture Series

InSAR for Geohazards Studies

Prof. Zhong Lu
Shuler-Foscue Chair
Geophysics
PhD. University of Alaska



Date : 25 November 2016 (Friday)

Time : 4:30pm

Venue : Z509

Research Interests

Application research related to volcano deformation mapping, magma supply dynamics from InSAR imagery and numerical modeling, earthquake deformation mapping, seismic slip distribution and fault geometry from InSAR and modeling, land subsidence and infrastructure stability monitoring, ground-water basin analysis with InSAR, underground nuclear explosion monitoring, landslide monitoring with InSAR, mapping mine-induced deformation, mapping water-level changes of wetlands, flood mapping with SAR and Landsat-7 imagery, soil moisture mapping with SAR/InSAR, vegetation characterization with SAR, tidal study with InSAR, glacier dynamics with InSAR, fire scar mapping with SAR and InSAR, arctic ice and water mapping with SAR/InSAR.

Technique developments on:

- 1) Synthetic aperture radar (SAR), interferometric SAR (InSAR), persistent scatterer InSAR (PSInSAR) processing, multi-aperture InSAR (MAI) processing and 3D deformation construction from InSAR and MAI/offset measurements,
- 2) High-resolution digital elevation model (DEM) generation with InSAR,
- 3) Land cover characterization with SAR and Landsat imagery, and
- 4) InSAR deformation mapping with ERS-1, ERS-2, Radarsat-1, JERS-1, SIR-C, SRTM, Envisat, ALOS, TerraSAR-X, TanDEM-X, COSMO-SkyMed satellite SAR imagery.

Experience

11/2013 - present, Shuler-Foscue Professor of Earth Sciences, Southern Methodist University.

12/2006 - 10/2013, Physical Scientist, U.S. Geological Survey, Cascades Volcano Observatory

3/1997 - 11/2006, Principal Scientist & Technical Fellow, Science Applications International Corporation, contractor to the U.S. Geological Survey/EROS,

9/1996 - 2/1997, Postdoctoral Research Associate, Geophysical Institute of University of Alaska

9/1992 - 8/1996, Research Assistant, Geophysical Institute, University of Alaska

All interested are welcome

All registered attendees will receive a Certificate of Attendance after the lecture.

Registration link: <https://myacs.polyu.edu.hk/utills/mysurvey/index.php/717782/lang-en>

Contact: Ms. Kathy LAW at kathywj.luo@polyu.edu.hk or 27664350.

