## Fall 2022 Seminars

	Name	Affiliation	Title
August 30	Alicia J. Hotovec- Ellis	USGS; California Volcano Observatory	Using earthquake-derived seismic velocity changes to monitor strain at volcanoes
September 6	Yuankun Xu	BSL	Remote sensing and hydromechanical characterization of landslides
September 13	Daria Holdenried- Chernoff	EPS	A statistical description of kinematic dynamos using field theory methods
September 20	Alba Rodriguez Padilla	UC Davis	The geologic fingerprint of multi- fault earthquakes in Southern California
			https://youtu.be/02sYuYsZfDY (https://youtu.be/02sYuYsZfDY)
September 27	Eiichiro Araki (Presented remotely via Zoom)	JAMSTEC	Very broadband low noise fiber optic sensing with seafloor cable off Muroto Nankai Trough, Japan. Development of sensing instruments and experiments
			Link to video on BSL Internal webpage
October 4	Shujuan Mao	Stanford	4D seismic interferometry: New constraints on groundwater monitoring and beyond
			https://youtu.be/UglxUPgMnp4 (https://youtu.be/UglxUPgMnp4)

October 11	Kelian Dascher- Cousineau	BSL	Earthquake Forecasting in a Data Rich Era
			https://youtu.be/66zU14wRdNI (https://youtu.be/66zU14wRdNI)
October 18	So Ozawa	Stanford	Mechanics of earthquakes on nonplanar faults
			https://youtu.be/_VZmCt6feC0 (https://youtu.be/_VZmCt6feC0)
October 25	Chris Milliner	Caltech	Constraining the Frictional Strength and State of Stress
	(Presented remotely via Zoom)		Along Coseismic Fault Ruptures using 3D Geodetic Imaging Data
			https://youtu.be/AQ6kCWLZYD8 (https://youtu.be/AQ6kCWLZYD8)
November 1	Ozgur Kozaci	InfraTerra	Bi-modal behavior of the North Anatolian fault documented using paleoseismology, cosmogenic nuclide dating, dendroseismology and archeoseismology
			https://youtu.be/OIrp4fEOFQM (https://youtu.be/OIrp4fEOFQM)
November 8	Sophie Coulson	Los Alamos National Laboratory	Predicting and Observing Patterns of Modern Sea Level Change and Crustal Deformation
			https://youtu.be/wlce8vOnpSI (https://youtu.be/wlce8vOnpSI)

November 15	Ahmed Ettaf Elbanna	University of Illinois Urbana Champaign	Building the Earthquake Virtual Machine: Modeling sequences of earthquakes and aseismic slip in complex fault zones  https://youtu.be/ZCWuQM1u-Ig (https://youtu.be/ZCWuQM1u-Ig)
November 22	Johan (Yoshi) Gilchrist	University of British Columbia	The collapse dynamics and terraced deposits of the largest explosive eruptions on Earth
			https://youtu.be/JsbOFdaWI_s (https://youtu.be/JsbOFdaWI_s)
November 29	Andrea Chiang	Lawrence Livermore National Laboratory	Regional Moment Tensor Inversion Using a Three- Dimensional Earth Model and its Application to the Western United States
			https://youtu.be/NISyGyK6ePE (https://youtu.be/NISyGyK6ePE)

# Spring 2022 Seminars

	Name	Affiliation	Title
January 25	Li-Wei Chen	UC Berkeley Exit Seminar	Accelerating full-waveform inversion at the global scale via
	(Presented remotely via Zoom)		source stacking followedby cross-correlations
February 1	Nicolas Coltice	ENS, Paris	Tectonics is a hologram
	**12 Noon PST		
	(Presented remotely via Zoom)		
February 8	Wenbo Wu	WHO	Seismic ocean thermometry - challenges and opportunities
	(Presented remotely via Zoom)		
February 15	Sujoy Mukhopadhyay	UC Davis	There and back again: A Story of Earth's volatile accretion and evolution
February 22	Max Rudolph	UC Davis	Earth's mantle viscosity and the evolution of large-scale structure
March 1	Heather Shaddox	BSL	Seismic detection of oceanic internal gravity waves

March 8	Julien Aubert  ** 12 Noon PST  (Presented remotely via Zoom)	PG Paris	Rapid geomagnetic variations - a new core message to decipher
March 15	Neala Creasy	LANL	Seismic Anisotropy from Crust to Core with 3D Forward Wave Simulations and Full Waveform Inversion
March 22	No Seminar		Spring Break
March 29	Sarah Lambart	Univ. of Utah	Melt2Mantle - New proxy to constrain the lithological makeup of the mantle
April 5	Yifang Chen	BSL	Volumetric interactions between major ruptures and fault zones illuminated by small earthquake properties
April 12	Jin Zhang **12 Noon PDT**	Univ. of New Mexico	Toward quantitative understanding of the volatile storage and transport in the Earth's interior
April 19	Rishav Mallick	Caltech	Understanding lithosphere deformation by bridging timescales from earthquake sequences to geodynamics
April 26	William Barnhart	USGS-Moffet	Earth's Rapid and Permanent Deformation: The View From Low Earth Orbit
May 3	Robert Bridges, Matt Lee, & Chris Sine	California Resources Corporation	Active Source Seismic in the Upstream Energy Business

### Fall 2021 Seminars

	Name	Affiliation	Title
August 31	Ruijia Wang (Presented remotely via	University of New Mexico	Complexity and Simplicity of Injection-induced Earthquakes in the Raton Basin
	Zoom)		https://youtu.be/7ix3V9npLa4 (https://youtu.be/7ix3V9npLa4)
September 7	Grzegorz Kwiatek **9:00 AM PDT** (Presented remotely via Zoom)	GFZ Potsdam	Adaptive stimulation strategy, reservoir structure and stress conditions as key factors contributing to successful 2018 and 2020 hydraulic stimulations performed in a frame of St1 Deep Heat project in Helsinki, Finland
			https://youtu.be/s3_9U8VklCk ( https://youtu.be/s3_9U8VklCk)
September 14	Dennise Templeton (Presented remotely via	Lawrence Livermore National Laboratory	Recommended practices for managing induced seismicity associated with geologic carbon storage
	Zoom)		https://youtu.be/1DeJ-g1ZguQ (https://youtu.be/1DeJ-g1ZguQ)
September 21	Curtis Baden	Stanford University	Bridging Earthquakes and Mountain Building in the Santa Cruz Mountains, CA
			https://youtu.be/UAxodXQKyRw (https://youtu.be/UAxodXQKyRw

September 28	Masayuki Kano  **4:30 PDT** (Presented remotely via Zoom)	Tohoku University	Spatial slip behavior for short- term slow slip events and relation to megathrusts along the Nankai subduction zone Link to video on BSL Internal webpage
October 5	Daniel Blatter	UCSD	Constraining melt and volatiles at the lithosphere-asthenosphere boundary with efficient Bayesian sampling based on regularized inversion https://youtu.be/-5CNUK0RA04 (https://youtu.be/-5CNUK0RA04)
October 12	Javier Fullea (Presented remotely via Zoom)	Universidad Complutense de Madrid, Spain Dublin Institute of Advanced Studies	Upper mantle thermochemical heterogeneity from coupled geophysical–petrological inversion of terrestrial and satellite data  https://youtu.be/CFp-d8EVDJw (https://youtu.be/CFp-d8EVDJw)
October 19	Annemarie Baltay- Sundstrom	USGS	Unraveling Earthquake Physics and Attenuation from Observed Ground Motions in California
October 26	Junle Jiang (Presented remotely via Zoom)	University of Oklahoma	Exploring connections between microseismicity, aseismic slip, and large earthquakes in Southern California  https://youtu.be/evRZZnP1ykw (https://youtu.be/evRZZnP1ykw)
November 2	No Seminar		

November 9	Valère Lambert	UCSC	Absolute stress levels on mature faults: Bridging insight from the lab and field through physics-based modeling  Link to video on BSL Internal webpage
November 16	No Seminar		
November 23	Heather DeShon	Southern Methodist University	Insights and conundrums stemming from induced earthquakes in Texas https://youtu.be/GF57_VLoLkM
			(https://youtu.be/GF57_VLoLkM)
November 30	Luca Malagnini	INGV Rome	Fluctuations of Crustal Permeability Inferred From Seismic Attenuation: Impacts on a Multi-Mainshock Sequence

## Spring 2021 Seminars

	Name	Affiliation	Title	
January 26	No Seminar - ShakeAlert meeting			
February 2	No Seminar - Northern CA NEHRP meeting			
February 9	Rachel Abercrombie	Boston University	Using Small Earthquakes to Probe the Controls on Earthquake Source Processes	
February 16	Zhongwen Zhan	Caltech	Geophysical sensing on submarine cables: a cocktail for two communities	
February 23	Juliane Dannberg	Univ. of Florida	The morphology, evolution and seismic visibility of partial melt at the core-mantle boundary: Implications for ULVZs	

March 2	Verónica Rodríguez Tribaldos	LBL	Towards regional subsurface characterization and monitoring using Dark Fiber DAS: challenges and opportunities
March 9	Naoki Uchida	Tohoku University	A Decade of Lessons Learned from the 2011 Tohoku-oki Earthquake
March 16	Christopher Johnson	Los Alamos National Laboratory	Seismic noise is the signal: Learning the earthquake activity on the central San Andreas Fault
March 23	No Seminar - Spr	ing Break	
March 30	Lauren Waszek	James Cook University	Constraints on structure, dynamics, and composition of the upper mantle using automated seismic waveform identification
April 6	Saeko Kita	Graduate Institute for Policy Studies	Intraslab earthquake, slow slip and repeating earthquake beneath Kii peninsula, southwestern Japan
April 13	Whyjay Zheng	UC Berkeley Statistics	The demise of Arctic ice caps: from glacier surge to ice stream
April 20	No Seminar - SSA	Meeting	
April 27	Kate Huihsuan Chen	National Taiwan Normal University	The nature of a dip-slip creeping fault in Taiwan: How and where it creeps

### Fall 2020 Seminars

	Name	A <b>ffi</b> liation	Title
September 1	Matti Morzfeld	UCSD	What is Bayesian inference, why is it useful in Earth science and why is it challenging to do numerically?
September 8	Susan Schwartz	UCSC	Where's Waldo? The Application of Template Matching to Understanding Fault and Glacier Mechanics
September 15	Lars Stixrude	UCLA	Planetary magnetic fields produced by silicate dynamos
September 22	Sylvain Barbot	USC	Excitation of San Andreas tremors by thermal instability below the seismogenic zone
September 29	Kevin Kwong	U. Washington	Insights into seismic deformation and subducting slab structure beneath Ecuador using teleseismic relocation and tomography
October 6	Magali Billen	UC Davis	Deep slab seismicity limited by rate of deformation in transition zone
October 13	Laura Wallace	GNS Science, New Zealand and University of Texas Institute for Geophysics	Relationships between slow slip events, megathrust locking, and seismicity at the Hikurangi subduction zone, New Zealand
October 20	Ebru Bozdag	CSM	Investigation of the Earth's mantle & outer core with 3D wave simulations
October 27	Frederik Simons	Princeton University	Through the Ocean to the Mantle: Twenty Thousand Leagues Under the Seas with a Fleet of Floating Seismic Robots
November 3			No seminar

November 10	Dan Shim	Arizona State University	Calcium Dissolution in Bridgmanite in the Earth's Deep Mantle
November 17	Brandon Schmandt	University of New Mexico	Seismically imaging magma reservoirs under large silicic calderas
November 24	Alex Robson	UC Berkeley	Exit Seminar
December 1	Ved Lekic	University of Maryland	To Be Announced

## Spring 2020 Seminars

	Speaker	Affiliation	Title	
Janury 21	Arthur Rodgers	LLNL	Toward Exascale Earthquake Ground Motion Simulations: Mw 7.0 Hayward Fault Ruptures	
January 28	Heather Shaddox	UC Santa Cruz	Burst-type Repeating Earthquakes as a Proxy for Transient Aseismic Slip	
February 4	Max Wyss	ICES International Centre for Earth Simulation Foundation	Estimating fatalities in earthquakes, and why probabilities of large earthquakes cannot be estimated based on the Gutenberg-Richter relation	
February 11	Sue Hough	USGS, Pasadena	Earthquake Ground Motions and Building Damage: The Long and Short of It	
February 18	Tarje Nissen- Meyer	Oxford University (visiting at Stanford)	Good Vibrations? Deciphering complex wavefields for deep Earth, shallow planets, explosions and elephants	
February 25	Vashan D. Wright	LSU (BSL visitor)	Neotectonics and Aging Sands: A Jamaican Story	
March 3	Federico Munch	BSL postdoc	Determining Earth's mantle thermo-chemical structure from joint analysis of seismic and electromagnetic sounding data	
March 10	Seminar car	nceled		
March 17	Yann Klinger	BSL/IPGP	The Dead Sea fault, a strike-slip fault model	
	(Presented remotely via Zoom.)			
March 24	Spring Recess - no seminar		r	
March 31	Avinash Nayak (presented via Zoom only)	LBNL	Joint inversion of body-wave travel times and surface-wave dispersion in Central California and identification of higher mode Rayleigh waves (Video Recording) (https://drive.google.com/file/d/16FP1oDBK2mkFSkFTleMjgTRn6o6oVBOG/view)	
April 7	Luca Dal Zilio	Caltech	Building of the Himalaya Across Scales: From Tectonics to Earthquakes (Video Recording) (https://drive.google.com/a/berkeley.edu/file/d/1Ppy7mDHaKYsXOYniUDGReeoCh6_vak_W/view usp=sharing)	
April 14	Yen Joe	Stanford	Axial Seamount as a unique laboratory to study how stress changes affect earthquake	

April 21 <b>Johanna</b> USGS, Mechanical controls on fault slip and de <b>M. Nevitt</b> Moffett Field Napa earthquake		<b>,</b>	Mechanical controls on fault slip and deformation at Earth's surface during the 2014 M6.0 South Napa earthquake
April 28	Eric Lindsey	Earth Observatory of Singapore	Unlocking the physics of earthquake hazards with geodesy: Megathrusts, mountains and Myanmar (Video Recording) (https://drive.google.com/a/berkeley.edu/file/d/1M8GgEYDs1RWrhYWhqKAcJFD6ipVNQL_c/view?usp=sharing)

#### Fall 2019 Seminars:

	Speaker	Affiliation	Title
September 3	Marco Bohnoff	GFZ	Seismomechanical reservoir characterization and controlling induced seismicity: Recent examples from The Geysers/California and Helsinki/Finland geothermal projects
September 10	Robert Martin-Short	BSL	Multi-scale seismic imaging of the Alaskan subduction zone
September 17	Lauren Waszek	New Mexico State University	Thermochemical controls for the visibility of upper and mid-mantle discontinuities
September 24	Kathryn Materna	BSL	Seismic coupling on plate boundary faults at the Mendocino Triple Junction
October 1	Stuart Russell	Berkeley	Global seismic monitoring: A Bayesian approach
October 8	Chi-Yuen Wang	BSL	Earthquake effects on groundwater - studied with Earth tides
October 15	Men-Andrin Meier	Caltech	Harnessing the Power of Deep Learning Algorithms to Design the Next-Generation Seismic Monitoring System
October 22	Sylvain Barbot	USC	From the microphysics of faulting to subduction-zone dynamics: constitutive and structural controls on the seismic cycle
October 29	Amy Williamson	U Oregon	Coseismic or Landslide? The source of the 2018 Palu Tsunamis
November 5	Dan Frost	BSL	Dynamic history of the inner core constrained by seismic anisotropy
November 12	Camilla Emily Penney	Cambridge	The role of lateral rheology contrasts in the evolution of mountain ranges: insights from South East Tibet
November 19	Jeremy Maurer	JPL	Geodetic remote sensing constrains moment release from the 2017/2018 combined SSE and earthquakes near Guerrero, Mexico
November 26	THANKSGIVING - no sen	ninar	
December 3	Jeff McGuire	USGS Menlo Park	Imaging the subducted Gorda plate from the deformation front to the ETS zone
December 10	AGU - no seminar		
December 17	Felipe Orellana	University of the Chinese Academy of Sciences	Thermo-chemical plume interactions with mantle viscosity layering and phase transformations: comparisons with seismic imaging

### **Spring 2019 Seminars:**

Title	Speaker	Affiliation	Title
	Speaker		
January 29	Dr. Walter Mooney	USGS/Menlo Park	The Upper Mantle Beneath North America: A New View from USArray Data
February 5	Prof. William Frank	USC	Self Diagnostic low- frequency earthquakes and the slow slip that drives them
February 12	Prof. Michael Bostock	Univ. of British Columbia	Controls on Seismicity in Cascadia
February 19	Prof. Cliff Thurber	Univ. of Wisconsin	What lies beneath Laguna del Maule, Chile?
February 26	Camilla Cattania	Stanford U.	Crack models to explain seismic cycles at different scales: small repeating earthquakes and vertical strike slip faults
March 5	Dr. Arben Pitarka	LLNL	Ground Motion Simulations of the M7, 2016 Kumamoto, Japan Earthquake Using Physics Based Rupture Models
March 12	Prof. Philippe Lognonné	IPG Paris	SEIS on Mars: Development challenges and first observations Abstract
March 19	Prof. Ebru Bozdag	Colorado School of Mines	Imaging Earth's mantle with adjoint tomography: From measurements to interpretation
March 26	Spring Break		
April 2	Guang Zhai	BSL postodc	Mechanical Modeling of Fluid-Rock Interactions: Volcano Deformation and Induced Seismicity
April 9	Felipe Gonzalez	EPS postdoc	Melting and stability of minerals at high pressure: consequences for Super- Earths and gas giants
April 16	Prof. Heather Ford	UC Riverside	Imaging the mantle structure of cratons: Implications for the formation and modification of the Wyoming lithosphere
April 23	Mark Jellinek	U. of British Columbia	Ice, fire or fizzle: The climate footprint of Earth's supercontinental cycles
Tuesday, April 30	Jill Banfield (F Lecture) 4PM Sibley Au	aculty Research	Mysteries of the Invisible World of Microbes
	Bechtel Engine		
May 7	Tushar Mittal	_	Eruptive tempo and climatic impact of the Deccan Traps

#### Fall 2018 Seminars:

	Speaker	Affiliation	Title
August 28	Kayla Kroll	Lawrence	Testing the Efficacy of

		~	rr
February 14	Han Yue	Caltech	The 2016 Kumamoto Earthquake Sequence:how the main shock starts and stops
February 21	Ana Aguiar Moya	Lawrence Livermore National Laboratory	Data Mining Microseismicity using PageRank
February 28	Pierre Dutilleul	McGill University	Multi-frequential periodogram and correlation analyses of earthquake numbers and hypocenter depths in central California
March 7	Bill Hammond	University of Nevada, Reno	GPS Imaging of Earth's Vertical Motion: From Sierra Nevada to North America
Monday, M 14th)	Tarch 13, special	seminar Room 141	McCone (no seminar March
March 13	Harriet Lau	Harvard	Tidal Tomography and Deep Mantle Buoyancy (Monday seminar)
March 21	Asaf Inbal	BSL	Transient aseismic deformation and deep seismicity along the San-Jacinto and the Newport- Inglewood faults
March 28		spring break	
April 4	Yves Guglielmi	Lawrence Berkeley National Laboratory	Exploring processes of induced seismicity from mesoscale field experiments
April 11	Amir Allam	University of Utah	The Denali Fault as a Plate Boundary: New Results from Double-difference Tomography, Receiver Functions, and Fault Zone Head Waves
April 18			Seismic Imaging of hydrates on US Margins (Arctic/Atlantic) with implications for hydrate/margin stability and climate
April 25	Chris Johnson	BSL	Exit Seminar
May 2	Felipe Orellana Rovirosa	BSL	Exit Seminar
May 9	Anya Reading	University of Tasmania	Ocean Microseisms and Antarctic Lithosphere: Seismological and Interdisciplinary Investigations

#### Fall 2016 Seminars:

	Speaker	Affiliation	Title
Aug 30	Kuo Fong Ma	National Central University, Taiwan	Investigation on fault zone and fluid migration activity after the 1999 M7.6 Chi-Chi, Taiwan, earthquake
Sept 6	Janire Prudencio	BSL	2D and 3D attenuation tomographies of active volcanoes
Sept 13	William Walter	Lawrence Livermore National Laboratory	Explosion Monitoring and the Source Physics Experiment (SPE)
Sant 20	Lion Vuo	DCI	Investigations of fault zone

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March 31	Estelle Chaussard	UC Berkeley	Interseismic deformation and potential for larger earthquakes on the Hayward-Calaveras Fault system
April 7	Jiayi Xie	University of Colorado Boulder	Inferring the oriented elastic tensor from surface wave observations: Preliminary application across the Western US
April 14	Sarah Bennett	Stanford University	Dig a Little Deeper: Decoding Intermediate-depth Earthquakes
April 21 (Cancelled)	Stephen Morris	UC Berkeley	Modelling of slab-scale stresses caused by the olivine-spinel transformation
April 28	Anne Obermann	Swiss Seismological Service (SED) at ETH Zurich	Monitoring with ambient noise: applications to volcanoes, fault zones and injection wells

#### Fall 2014 Seminars:

	Speaker	Affiliation	Title
September 2	Pierre Boue	Stanford	Teleseismic body waves retrieval from ambient seismic noise correlation
September 9	Allen McNamara	ASU	Understanding the compositional structure of Earthâ®cs mantle
September 16	Yousef Bozorgnia	UC Berkeley	NGA-West2 Research Project
September 23	Angie Chung	Stanford	Rapidly Evaluating Damage Using High Density Networks in Noisy Urban Environments
September 30	Artie Rodgers	LLNL	Simulations of Earthquake Ground Motions in the San Francisco Bay Area
October 7	Justin Rubinstein	USGS	Determining the Seismic Hazard of Natural and Induced Earthquakes
October 14	Zhongwen Zhan	UC San Diego	Rupture complexity of deep earthquakes: the large, the hot, and the fast
October 21	Adrien Arnulf	UC San Diego	Anatomy of an active submarine volcano using wavefield based techniques
October 28	Ben Brooks	USGS	Harvesting point clouds: Near field deformation from the South Napa Earthquake from Mobile Laser Scanning geodesy
November 4	Meghan Miller	USC	Imaging the upper mantle structure of northwest Africa: Influence of mantle flow on continental deformation
November 11	NONE - Veterans Day		
November 18	Sang-Ho Yun	JPL	InSAR Error Budget in the Air
November	Diego Melgar	UC Berkeley	Tsunami inundation prediction