



Wednesday, March 18

Check into hotel

After
3:00 pm

Holiday Inn - Orangeburg
329 Route 303,
Orangeburg, New York, 10962

8:00 pm

Carpool to dinner from the hotel (meet in the hotel lobby at 7:30 pm)
Dinner at Mountain House Pizza
330 Route 340, Sparkill, NY, 10976

Thursday, March 19

Seminar Room, 1st floor of Comer Geochemistry Building

Carpool from **Holiday Inn** to LDEO

8:30 am

Check in and Opening Remarks (Comer)

9:00 am

Coffee, Introductions, and Tour (Comer)

Session 1: Ice and Oceans

11:00 am

Tidally induced icequake swarms on the Ross Ice Shelf, Antarctica

Hank Cole

Colorado State

11:20 am

Dense seismic array characterization of glacier stick-slip forced by surface-water supply

Nathan Stevens

U. Wisconsin

11:40 am	Uppermost mantle structure beneath the Amundsen Sea Embayment, West Antarctica	Erica Lucas	Penn State
12:00 pm	Water mixing and circulation within the South Atlantic Basin constrained by seismic reflection images	Jingxuan Wei	Texas A&M
12:20 pm	Lunch (Comer)		
1:20 pm	LDEO Seismometer Museum		
<i>Session 2: Machine Learning and Novel Seismic Methods</i>			
1:40 pm	Machine-learning-based analysis of geological susceptibility to induced seismicity in the Montney Formation.	Paulina Wozniakowska	U. Calgary
2:00 pm	Time-lapse full-waveform inversion for VTI media	Yanhua Liu	Colorado School of Mines
2:20 pm	Towards an improved understanding of surface-wave overtone interference and its applications	Anant Harihanran	Brown University
2:40 pm	Poster Session I		
<i>Session 3: Techniques and Applications in Seismic Imaging 1</i>			
4:10 pm	Joint inversion of Rayleigh waves and receiver functions in the Main Ethiopian Rift using a trans-dimensional hierarchical Bayesian inversion algorithm	Jon Petruska	UC Santa Barbara
4:30 pm	Super-resolution via weighted time-reversal	Manuel Alejandro Jaimes Caballero	Colorado School of Mines
4:50 pm	Imaging the deeper crust in Oklahoma using local earthquake waveforms	Pranshu Ratre	U. Oklahoma
5:10 pm	Hierarchical seismic imaging of the crust in Southern California	Malcolm White	USC
Lightning talks			
5:30 pm	Dependence of earthquake impact on magnitude: a case study of Greek seismicity	Ionna Triantafyllou	U. Athens
5:40 pm	Pyper, a toolbox for full waveform inversion on HPC clusters	Congyue Cui	Princeton U.
6:00 pm	Leave for <i>Dinner</i>		

Friday, March 20

Monell Auditorium

Carpool from **Holiday Inn** to LDEO

Session 4: Techniques and Applications in Seismic Imaging 2

9:00 am Where do mid-lithospheric discontinuities exist? Hannah Krueger Brown U

9:20 am Rayleigh wave phase velocity model for the Gulf of Mexico and its continental margins from ambient noise tomography Luan Nguyen Rice U

9:40 am Thermo-compositional structure of the Eastern Canadian Shield as a record of its tectonic history Isabella Altoe IC London

10:00 am **Poster Session II**

Session 5: Earthquake Location, Processes, and Hazard

11:30 am Is aftershock zone area a good proxy for rupture area? Jing Ci Neo U. of Michigan

11:50 am Distinguishing the coseismic phase of the earthquake cycle with seismogeodesy Dorian Golriz Scripps

12:10 pm **LDEO Seismometer Museum**

12:30 pm **Lunch (Comer)**

Session 6, Part 1: Volcano Seismicity

1:30 pm The role of accurate earthquake locations in the mapping of a volcanic plumbing system Jade Eyles U. East Anglia

1:50 pm High-resolution earthquake location and receiver function imaging across the Wrangell Volcanic Field Kiara Daly & Michael Mann Cornell

Session 6, Part 2: Normal-Mode and Global Seismology, Deep Interior

2:10 pm Anelastic adjoint inversion: initial results Ridvan Orsvuran U. Cote d'Azur

2:30 pm Sensitivity kernels for inferring Lorentz stresses from normal-mode frequency splittings in the Sun Srijan Bharati Das Princeton U.

2:50 pm **Poster Session III**

Session 7: Subduction Zones, Slow-Slip, Tsunami Early Warning

4:20 pm Seismic anisotropy beneath the Tonga Subduction Zone based on adjoint tomography Xueyan Li UT Dallas

4:40 pm Lithospheric and asthenospheric structure of Alaska from a joint inversion of body and surface waves Isabella Gama Brown U

5:00 pm **Career Panel**

6:00 pm

Concluding Remarks

6:15 pm

Dinner in Comer

Poster Session I - Thursday 2:40 pm

Lun Zhang - Imaging central Pacific upper mantle using P-wave tomography and receiver functions

Brennan Brunsvik - Joint shear velocity and anisotropy tomography of the eastern North American passive margin

Sirawich Pipatprathanporn - Analysis of one year of continuous hydrophone data from MERMAID at 1500 meters depth

Joshua Russell - Surface-wave constraints on upper mantle fabric beneath the south Pacific: Evidence for pressure-driven flow associated with the Superswell

Ziqi Zhang - Receiver Function Deconvolution with Noisy Seafloor Seismic Data: Amplifying conversions from the Lithosphere

Celine Fliedner - Experimental estimation of seismic attenuation of an exhumed greenschist

Monica Estrada - Correlating Porosity Characteristics of Miocene Formation Reservoirs from Well Log Data in the Main Pass Protraction Area in the Gulf of Mexico

Michelle Lee - Detection of magma beneath northern and southern rift zones of Axial Seamount

Xiaochuan (Kelvin) Tian - Machine Learning on Numerical Slider-Blocks

Miguel Neves - Investigation of earthquakes in Iberia using a Deep Convolutional Neural Network Phase Picker

Shiyu Zeng - Using the machine learning to automatically select windows on the FFT spectrum

Theresa Sawi - Unsupervised feature extraction of seismicity at an Alpine glacier

Poster Session II - Friday 10:00 am

Dolgormaa Munkhbaatar - 1D velocity model determination in Gobi-Altai region from local earthquakes

Mohan Pant - Investigating structural variations along Nepalese Himalayas using local seismic tomography

Kaelie Contreras - Seismic Imaging of the Bushveld Complex, South Africa

Congcong Yuan - New Approaches to Measuring Time- and Frequency-dependent Seismic Phase Variations for Coda Wave Interferometry

Chao Song - The Spatial Relationship Between Contemporaneous Tremor Detections in Relatively Low and High Frequency Bands

Mengli Zhang - Enhancing USArray Transportable Array data by compressive sensing

David (DJ) Miller - Comparing Coda Wave Interferometry and Volcanic Deformation in Alaska

Li Ren - Concurrent elastic inversion of body and Rayleigh waves using envelope-based and waveform-based misfit function

Nomin-Erdene Erdenetsogt - Detection of earthquake active fault by the shallow reflection seismic imaging

Alina Valdez - Moho depth distribution on the southwestern United States using receiver functions.

Christopher Carchedi - Shear Velocity Structure across the Indo-Burman Accretionary Margin from Ambient-Noise Rayleigh Waves

Rashni Anandawansha - New regional study to identify thermochemical properties for the MTZ beneath the US.

Poster Session III - Friday 2:50 pm

Preiser Brunat - RUMShake: A Pilot Amplification Study in Western Puerto Rico

Tyler Newton - Relating microseismicity to fault geometry at the Rattlesnake Ridge Landslide

Doriane Drolet - Structural Controls on Aftershocks of the Mw 7.1 Iniskin Earthquake in Alaska

Sydney Dybing - How soon can you tell that a big earthquake is big? Investigating determinism using borehole strain

Arjun Neupane - Preliminary Assessment of Corner Frequency and Stress Drop Variation in the 2019 Ridgecrest Earthquake Sequence using Empirical Green's Function Analysis

Lucas Sawade - Global Centroid Moment Tensor Inversions using the Spectral-Element-Method

Rachel Marzen - Tectonic Inheritance and Seismicity in the Southeastern United States Rifted Margin

Claire Richardson - Development of a large global, high quality dataset from an adaptive empirical wavelet method to sharpen deep mantle imaging

Ravi Wickramathilake - Assessing intrinsic versus scattering attenuation in Earth's inner core

Peter Makus - A Global Database of S to P receiver functions

Yixian Zheng - Seismic evidence of a Low-velocity layer atop the 410km discontinuity in South Peru from (s)S-to-P conversions

Lise Alalouf - Modeling Slow Slip Events (SSEs) and Earthquake Ruptures in the Costa Rica Subduction Zone

Tara Nye - Characterization of tsunami earthquake parameters for use in early tsunami warning
