# **Overview of Technical Program**

Monday 14 April	Tuesday 15 April	Wednesday 16 April	Thursday 17 April	Friday 18 April
1–4 PM	7 AM–5 PM	7:30 AM–5 PM	7:30 AM–5 PM	7 AM–5 PM
Pride of Baltimore Field	Registration	Registration	Registration	Smithsonian Private
Seminar	East Foyer	East Foyer	East Foyer	Tours and Washington
1–4:30 PM	8–9:15 AM	8–9:15 AM	8–9:15 AM	Fault Lines Field
How to Open a	Technical Sessions	Technical Sessions	Technical Sessions	Seminar
Presentation and Foster	9:15–10:30 AM	9:15–10:30 AM	9:15–10:30 AM	9 AM–Noon
a Great Q&A Workshop	Exhibits, Posters Break	Exhibits, Posters Break	Exhibits, Posters Break	Pride of Baltimore Field
Peale A-C	Key Ballroom 1-8	Key Ballroom 1-8	Key Ballroom 1-8	Seminar
1–5 PM	10:30–11:45 AM	10:30–11:45 AM	10:30–11:45 AM	-
Building a High-	Technical Sessions	Technical Sessions	Technical Sessions	
Resolution Earthquake	11:45 AM-2 PM	Noon-2 PM	11:45 AM–2 PM	
Catalog from Raw	Lunch Break	Annual Business and	Lunch Break	
Waveforms: A Step-by-	2–3:15 PM	Awards Luncheon	2–3:15 PM	
Step Guide Workshop	Technical Sessions	Holiday Ballroom 4-6	Technical Sessions	
Key Ballroom 10	3:15–4:30 PM	2–3:15 PM	3:15–4:30 PM	
1–5 PM	Exhibits, Posters Break	Technical Sessions	Exhibits, Posters Break	
Distributed Acoustic	Key Ballroom 1-8	3:15–4:30 PM	Key Ballroom 1-8	
Sensing Open-source	4:30–5:45 PM	Exhibits, Posters Break	4:30–5:45 PM	
Software Workshop	Technical Sessions	Key Ballroom 1-8	Technical Sessions	
Key Ballroom 11	6–7 PM	4:30–5:45 PM	-	
3–7:30 PM	Plenary	Technical Sessions		
Registration Opens	Holiday Ballroom 4-6	6–7 PM	-	
East Foyer	7–8 PM	Joyner Lecture		
5–6 PM	Student/Early-Career	Holiday Ballroom 4-6		
Opening Reception and	Reception*	7–8 PM	-	
Exhibits	Holiday Ballroom 2-3	Joyner Reception		
Exhibit Hall, Key		Exhibit Hall, Key		
Ballroom 1-8		Ballroom 1-8		
6–7 PM				
Plenary				
Holiday Ballroom 4-6				
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\* Invite only event

## Tuesday, 15 April

### **Oral Sessions**

Time	Holiday Ballroom 1	Holiday Ballroom 4–6	Key Ballroom 9	Time	Key Ballroom 10	Key Ballroom 11	Key Ballroom 12
8:00– 9:15 am	Adventures in Social Seismology: Ethical Engagement, Earthquake Early Warnings, Operational Fore- casts, and Beyond	Network Seismology: Recent Devel- opments, Challenges and Lessons Learned	Fiber-optic Sensing Applications in Seismology	8:00- 9:15 ам	Late-breaking on Recent and Future Large Earthquakes	Testing, Testing 1 2 3: Appropriate Evaluation of New Seismic Hazard and Risk Models	
9:15-10:30 ам				9:15-10:30 ам	Poster Break		
10:30-11:45 am	Adventures in Social Seismology: Ethical Engagement, Earthquake Early Warnings, Operational Fore- casts, and Beyond	Network Seismology: Recent Developments, Challenges and Lessons Learned	Fiber-optic Sensing Applications in Seismology	10:30-11:45 am	Late-breaking on Recent and Future Large Earthquakes	Advancing Time-dependent PSHA and Seismic Risk Assess- ment: Accounting for Short- to Medium-term Clustering	From Physics to Forecasts: Advancements and Future Directions of Induced Seismicity Research
11:45 ам– 2:00 рм	Lunch Break			11:45 ам– 2:00 рм	Lunch Break		
2:00-3:15 рм	Improving the State of the Art of Earthquake Forecasting Through Models, Testing and Communica- tion	Network Seismology: Recent Developments, Challenges and Lessons Learned	Innovative Applications of Seismic Nodal Technology for Hazard Mitigation and Earth System Monitoring	2:00-3:15 pm	Advanced Geophysical Observa- tions, Analytical Methods, and New Insights for Earthquake Swarms	Accuracy and Variability of Physics-based Ground Motion Modeling	Mechanistic Insights into Fluid- induced Earthquakes from the Laboratory to the Field
3:15-4:30 рм	Poster Break			3:15-4:30 рм	Poster Break		
4:30-5:45 рм	0 0 0	ESC-SSA Joint Session:Seismology in the Global Oceans: Advances in Methods and Observations		4:30-5:45 pm	Scientific Machine Learning for Forward and Inverse Wave Equa- tion Problems	Accuracy and Variability of Physics-based Ground Motion Modeling	Mechanistic Insights into Fluid- induced Earthquakes from the Laboratory to the Field
6:00-7:00 рм	Plenary Address: The USGS Earthquake Hazards Program: Science to Support Decision-Making			6:00-7:00 рм	Plenary Address: The USGS Earthquake Hazards Program: Science to Support Decision-Making		
7:00-8:00 рм	Student/Early-Career Reception			7:00-8:00 рм	Student/Early-Career Reception		

#### **Poster Sessions**

- Accuracy and Variability of Physics-based Ground Motion Modeling
- Advanced Geophysical Observations, Analytical Methods, and New Insights for Earthquake Swarms
- Advancing Time-dependent PSHA and Seismic Risk Assessment: Accounting for Short- to Medium-term Clustering
- Adventures in Social Seismology: Ethical Engagement, Earthquake Early Warnings, Operational Forecasts, and Beyond
- Building and Decoding High-resolution Earthquake Catalogs With Statistical and Machine-learning Tools
- ESC-SSA Joint Session:Seismology in the Global Oceans: Advances in Methods and Observations
- Fiber-optic Sensing Applications in Seismology
- From Physics to Forecasts: Advancements and Future Directions of Induced Seismicity Research
- Geophysics in a Changing World: Monitoring Applications from Seismology and Beyond
- Improving the State of the Art of Earthquake Forecasting Through Models, Testing and Communication
- Innovative Applications of Seismic Nodal Technology for Hazard Mitigation and Earth System Monitoring
- Late-breaking on Recent and Future Large Earthquakes
- Mechanistic Insights into Fluid-induced Earthquakes from the Laboratory to the Field
- Network Seismology: Recent Developments, Challenges and Lessons Learned
- Scientific Machine Learning for Forward and Inverse Wave Equation Problems
- Testing, Testing 1 2 3: Appropriate Evaluation of New Seismic Hazard and Risk Models

# Wednesday, 16 April

## **Oral Sessions**

Time	Holiday Ballroom 1	Holiday Ballroom 4–6	Key Ballroom 9	Time	Key Ballroom 10	Key Ballroom 11	Key Ballroom 12		
8:00-	Performance and Progress of		Earth's Structure from the Crust to	8:00-	The Landscape Record of Earth-	Recent Advances in Modeling	Advances in Reliable Earthquake		
9:15 ам	Earthquake Early Warning Sys-		the Core	9:15 AM	quakes and Faulting	Near-source Ground Motions for	Source Parameter Estimation		
	tems Around the World					Seismic Hazard Applications			
9:15-10:30 ам	Poster Break			9:15-10:30 ам	9:15–10:30 AM Poster Break				
10:30–11:45 ам	Performance and Progress of Earthquake Early Warning Sys- tems Around the World		Earth's Structure from the Crust to the Core	10:30-11:45 ам	The Landscape Record of Earth- quakes and Faulting	Recent Advances in Modeling Near-source Ground Motions for Seismic Hazard Applications	Advances in Reliable Earthquake Source Parameter Estimation		
11:45 ам– 2:00 рм	Annual Business and Awards Luncheon		11:45 ам– 2:00 рм	Annual Business and Awards Luncheon					
2:00-3:15 рм	Data-driven and Computational		Earth's Structure from the Crust to	2:00-3:15 рм	Unusual Earthquakes and Their	Station Installations and Site	Advances in Reliable Earthquake		
	Characterization of Non-earth-		the Core		Implications	Conditions, a Quest for Improved	Source Parameter Estimation		
	quake Seismoacoustic Sources					Strong Motion Database			
3:15-4:30 рм	Poster Break		3:15-4:30 рм	Poster Break					
4:30-5:45 рм	Fifty Years and Beyond of Broad-		Earth's Structure from the Crust to	4:30-5:45 рм	Predictability of Seismic and	Station Installations and Site	Seismology for the Energy Transi-		
	band Seismic Instrumentation:		the Core		Aseismic Slip: From Basic Science	Conditions, a Quest for Improved	tion		
	Performance, Precision and				to Operational Forecasts	Strong Motion Database			
	Uncertainties								
6:00-7:00 рм	Joyner Lecture: Risk and Reward: Working at the Boundaries of Earthquake Science		6:00-7:00 рм	Joyner Lecture: Risk and Reward: Working at the Boundaries of Earthquake Science					
7:00-8:00 рм	Joyner Reception		7:00-8:00 рм	Joyner Reception					

#### **Poster Sessions**

- Advances in Reliable Earthquake Source Parameter Estimation
- Data-driven and Computational Characterization of Non-earthquake Seismoacoustic Sources
- Earth's Structure from the Crust to the Core
- Fifty Years and Beyond of Broadband Seismic Instrumentation: Performance, Precision and Uncertainties
- The Landscape Record of Earthquakes and Faulting
- Performance and Progress of Earthquake Early Warning Systems Around the World
- Predictability of Seismic and Aseismic Slip: From Basic Science to Operational Forecasts
- Recent Advances in Modeling Near-source Ground Motions for Seismic Hazard Applications
- Seismology for the Energy Transition
- Station Installations and Site Conditions, a Quest for Improved Strong Motion Database
- Unusual Earthquakes and Their Implications

# Thursday, 17 April

## **Oral Sessions**

Time	Holiday Ballroom 1	Holiday Ballroom 4–6	Key Ballroom 9	Time	Key Ballroom 10	Key Ballroom 11	Key Ballroom 12
8:00-	Exploring Planetary Interiors	Advancements in Forensic Seis-	Numerical Modeling in Seismol-	8:00-	Earthquakes, Lithospheric Struc-	Challenges and Opportunities	Earthquake-triggered Ground
9:15 ам	and Seismology: Observations,	mology and Explosion Monitoring	ogy: Theory, Algorithms and	9:15 am	ture, and Dynamics in Stable	in Constraining Ground-motion	Failure: Data, Hazards, Impacts
	Models, Experiments and Future		Applications		Continental Region	Models from Physics-based	and Models
	Missions					Ground-motion Simulations	
9:15-10:30 ам	Poster Break			9:15-10:30 ам		Poster Break	
10:30–11:45 ам	Visualization and Sonification in	Advancements in Forensic Seis-	Numerical Modeling in Seismol-	10:30–11:45 ам	Earthquakes, Lithospheric Struc-	Challenges and Opportunities	Why Ignore the Structure? Soil-
	Solid Earth Geosciences, What's	mology and Explosion Monitoring	ogy: Theory, Algorithms and		ture, and Dynamics in Stable	in Constraining Ground-motion	structure Interaction and Site
	Next?		Applications		Continental Region	Models from Physics-based	Response at Local and Regional
						Ground-motion Simulations	Scales
11:45 ам– 2:00 рм	Lunch Break		11:45 AM— 2:00 РМ Lunch Break				
2:00-3:15 рм	Earthquake Shaking and the Geologic Record: Triggered Phenomena and Preserved Fragile Geologic Features	Advancements in Forensic Seis- mology and Explosion Monitoring	New Directions in Environmen- tal, Seismic Hazard and Mineral Resource Exploration Studies	2:00-3:15 рм	Exploring the Complexity of Fault Discontinuities	Challenges and Opportunities in Constraining Ground-motion Models from Physics-based Ground-motion Simulations	Macroseismic Intensity: Past, Present and Future
3:15-4:30 рм	Poster Break			З:15-4:30 РМ Poster Break			
4:30-5:45 рм		Advancements in Forensic Seis-	New Directions in Environmen-	4:30-5:45 рм	Compiling Active Faults for	Modern Waveform Processing and	
		mology and Explosion Monitoring	tal, Seismic Hazard and Mineral		Improved Hazard Modeling from	Engineering Datasets - Accessibil-	
			Resource Exploration Studies		Cascadia to Alaska	ity, Quality Control, and Metadata	

#### **Poster Sessions**

- Advancements in Forensic Seismology and Explosion Monitoring
- Advancing Seismic Hazard Models
- Challenges and Opportunities in Constraining Ground-motion Models from Physics-based Ground-motion Simulations
- Compiling Active Faults for Improved Hazard Modeling from Cascadia to Alaska
- Earthquake Shaking and the Geologic Record: Triggered Phenomena and Preserved Fragile Geologic Features
- Earthquake-triggered Ground Failure: Data, Hazards, Impacts and Models
- Earthquakes, Lithospheric Structure, and Dynamics in Stable Continental Region
- Exploring Planetary Interiors and Seismology: Observations, Models, Experiments and Future Missions
- Exploring the Complexity of Fault Discontinuities
- Macroseismic Intensity: Past, Present and Future
- Modern Waveform Processing and Engineering Datasets Accessibility, Quality Control, and Metadata
- New Directions in Environmental, Seismic Hazard and Mineral Resource Exploration Studies
- Numerical Modeling in Seismology: Theory, Algorithms and Applications
- Temporally Variable Records of Earthquake Behavior and Considerations for Seismic Hazard Analyses
- Why Ignore the Structure? Soil-structure Interaction and Site Response at Local and Regional Scales