Overview of Technical Program

Tuesday 14 April

9 AM–4 PM
Introduction to DAS for Seismology: From Data Acquisition to Analysis Workshop
Ballroom Section D

Noon–4 PM
Advancing Geophysical Research with Cloud Computing Workshop
Ballroom Section B

1–4 PM
Publishing: How to Review and How to Be Reviewed Workshop
Ballroom Section A

3–7:30 PM
Registration Opens
Hall A & B

4–5 PM
Exploring Careers in Industry: Panel Discussion & Networking Session Workshop
Conference Center Lower Level Lobby

5–6 PM
Opening Reception
Hall A & B

6:15–7:15 PM
Keynote Plenary
Hall C

Wednesday 15 April

7 AM–5 PM
Registration
Hall A & B

8–9:15 AM
Technical Sessions

9:15–10:30 AM
Poster Break
Hall A & B

10:30–11:45 AM
Technical Sessions

11:45 AM–2 PM
Lunch Break

12:30–1:45 PM
NEHRP Forum
Hall C

2–3:15 PM
Technical Sessions

3:15–4:30 PM
Poster Break
Hall A & B

4:30–5:45 PM
Technical Sessions

6–7 PM
Panel Presentation
Hall C

7–8 PM
Student/Early-Career Reception*
Exhibit Hall

Thursday 16 April

7 AM–5 PM
Registration
Hall A & B

8–9:15 AM
Technical Sessions

9:15–10:30 AM
Poster Break
Hall A & B

10:30–11:45 AM
Technical Sessions

Noon–12:50 PM
Annual Business and Awards Ceremony
Hall C

1–2:15 PM
Luncheon
Conference Center Lower Level Lobby

2:15–3:30 PM
Technical Sessions

3:30–4:30 PM
Poster Break
Hall A & B

4:30–5:45 PM
Technical Sessions

6–7 PM
Joyner Lecture
Hall C

7–8 PM
SSA Honors Reception
Hall A & B

Friday 17 April

7 AM–5 PM
Registration
Hall A & B

8–9:15 AM
Technical Sessions

9:15–10:30 AM
Poster Break
Hall A & B

10:30–11:45 AM
Technical Sessions

11:45 AM–2 PM
Lunch Break

2–3:15 PM
Technical Sessions

3:15–4:30 PM
Poster Break
Hall A & B

4:30–5:45 PM
Technical Sessions

Saturday 18 April

8 AM–Noon
From Richter to Real Time: Tracking the Evolution of Earthquake Science at Caltech Field Seminar

8 AM–6 PM
Multi-hazards: Earthquakes, Fire and Water Field Seminar

* Invitation only event

Wednesday, 15 April

Oral Sessions

Time	*Ballroom A*	*Ballroom B*	*Ballroom C*	*Ballroom D*
8:00–9:15 AM	Regional Source, Path and Site Effects in Earthquake Ground Motions	ESC-SSA Joint Session: Advanced Methods for Harnessing Seismic Noise Analysis in Applied Seismology		Physics of Earthquakes: Insights from Theory and Observations
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	Regional Source, Path and Site Effects in Earthquake Ground Motions	Advancing Seismic Hazard and Risk Assessment through Multi-Disciplinary Approaches		Physics of Earthquakes: Insights from Theory and Observations
11:45 AM–2:00 PM	Lunch Break			
2:00–3:15 PM	Regional Source, Path and Site Effects in Earthquake Ground Motions	Advancing Seismic Hazard and Risk Assessment through Multi-Disciplinary Approaches		Physics of Earthquakes: Insights from Theory and Observations
3:15–4:30 PM	Poster Break			
4:30–5:45 PM	Seismology for All: Expanding STEM Education Through Accessible Tools and Global Collaboration	Advancing Seismic Hazard and Risk Assessment through Multi-Disciplinary Approaches	Detecting, Characterizing and Monitoring Mass Movements	Physics of Earthquakes: Insights from Theory and Observations
6:00–7:00 PM	Panel Presentation: Building a Resilient Future: What New Research Directions, Technology Developments and Partnerships are Needed?			
7:00–8:00 PM	Student/Early-Career Reception			

Time	*Ballroom E*	*Ballroom F*	*Ballroom G*	*Ballroom H*
8:00–9:15 AM	Network Seismology: Recent Developments, Challenges and Lessons Learned	Planetary and Gravitational Wave Seismology	Physical Properties of Fault Zones from the Seismic Source to Earth's Surface	New Possibilities for InSAR in Earthquake Science: the NISAR Mission and OPERA Displacement Maps
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	Network Seismology: Recent Developments, Challenges and Lessons Learned	Planetary and Gravitational Wave Seismology	Physical Properties of Fault Zones from the Seismic Source to Earth's Surface	Fault Networks and Seismic Hazard in the Nevada-California Borderland
11:45 AM–2:00 PM	Lunch Break			
2:00–3:15 PM	Network Seismology: Recent Developments, Challenges and Lessons Learned	Cryoseismology: Advances in Technology and Scientific Discovery	Earth's Structure from the Crust to the Core	Fault Networks and Seismic Hazard in the Nevada-California Borderland
3:15–4:30 PM	Poster Break			
4:30–5:45 PM	Subaqueous Evidence for Earthquakes, Coseismic Landslides, Tsunamis and other Cascading Hazards	Cryoseismology: Advances in Technology and Scientific Discovery	Earth's Structure from the Crust to the Core	Time-Dependent Seismic Hazard Assessment: Models, Data and Applications
6:00–7:00 PM	Panel Presentation: Building a Resilient Future: What New Research Directions, Technology Developments and Partnerships are Needed?			
7:00–8:00 PM	Student/Early-Career Reception			

Poster Sessions

- Advancing Seismic Hazard and Risk Assessment through Multi-Disciplinary Approaches
- Cryoseismology: Advances in Technology and Scientific Discovery
- Detecting, Characterizing and Monitoring Mass Movements
- Earth's Structure from the Crust to the Core
- ESC-SSA Joint Session: Advanced Methods for Harnessing Seismic Noise Analysis in Applied Seismology
- Fault Networks and Seismic Hazard in the Nevada-California Borderland
- Network Seismology: Recent Developments, Challenges and Lessons Learned
- New Possibilities for InSAR in Earthquake Science: the NISAR Mission and OPERA Displacement Maps
- Physical Properties of Fault Zones from the Seismic Source to Earth's Surface
- Physics of Earthquakes: Insights from Theory and Observations
- Planetary and Gravitational Wave Seismology
- Regional Source, Path and Site Effects in Earthquake Ground Motions
- Seismology for All: Expanding STEM Education Through Accessible Tools and Global Collaboration
- Subaqueous Evidence for Earthquakes, Coseismic Landslides, Tsunamis and other Cascading Hazards
- Time-Dependent Seismic Hazard Assessment: Models, Data and Applications

Thursday, 16 April

Oral Sessions

Time	*Ballroom A*	*Ballroom B*	*Ballroom C*	*Ballroom D*
8:00–9:15 AM	The Landscape Record of Earthquakes and Faulting	ESC-SSA Joint Session: Interpreting Volcanic Unrest and Eruption Data for Effective Crisis Management	International Collaboration to Advance Earthquake Science and Disaster Response	Physics of Earthquakes: Insights from Theory and Observations
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	The Landscape Record of Earthquakes and Faulting	Advances and New Challenges in Investigating Seismic Site Response	Earthquake Swarms Across the Earthquake Cycle: Precursors, Transients and Aftereffects	Developing Data-Driven Methods in the AI Era: New Approaches to Earthquake Science
Noon–12:50 PM	Annual Business and Awards Ceremony			
1:00–2:15 PM	Luncheon			
2:15–3:30 PM	The Landscape Record of Earthquakes and Faulting	Advances and New Challenges in Investigating Seismic Site Response	New Developments in Earthquake Rupture Physics For Source Characterization and Ground Motion Modeling	Developing Data-Driven Methods in the AI Era: New Approaches to Earthquake Science
3:30–4:30 PM	Poster Break			
4:30–5:45 PM	Source Properties of Microearthquakes: Insights from Laboratory, Induced and Natural Events	Recent Contributions of Social Science Research to Understanding Earthquakes	New Developments in Earthquake Rupture Physics For Source Characterization and Ground Motion Modeling	Developing Data-Driven Methods in the AI Era: New Approaches to Earthquake Science
6:00–7:00 PM	Joyner Lecture: Seismic Wave Propagation in Complex Geological Domains: From Site Effects in Ground Motion to Diffuse Fields in Passive Seismology			
7:00–8:00 PM	SSA Honors Reception			

Time	*Ballroom E*	*Ballroom F*	*Ballroom G*	*Ballroom H*
8:00–9:15 AM	Advancing Earthquake Early Warning: Science, Technology and Engagement in the U.S. and Beyond	Data-Driven and Computational Characterization of Non-Earthquake Seismoacoustic Sources	Earthquake Ground Motions and Structural Response: Emerging Tools and Applications	Mechanisms and Seismogenic Structure for Large Continental Earthquakes
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	Advancing Earthquake Early Warning: Science, Technology and Engagement in the U.S. and Beyond	Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile and Beyond	Earthquake Ground Motions and Structural Response: Emerging Tools and Applications	Evolving Frontiers in Explosion Monitoring and Source Physics
Noon–12:50 PM	Annual Business and Awards Ceremony			
1:00–2:15 PM	Luncheon			
2:15–3:30 PM	Advancing Earthquake Early Warning: Science, Technology and Engagement in the U.S. and Beyond	Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile and Beyond	SSJ-SSOC-SSA Joint Session: From Slow to Fast Earthquakes: Bridging the Spectrum of Fault Slip	Evolving Frontiers in Explosion Monitoring and Source Physics
3:30–4:30 PM	Poster Break			
4:30–5:45 PM	Fiber-Optic Sensing Applications in Seismology and Environmental Science	Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile and Beyond	SSJ-SSOC-SSA Joint Session: From Slow to Fast Earthquakes: Bridging the Spectrum of Fault Slip	Seismotectonics of Southern and Baja California
6:00–7:00 PM	Joyner Lecture: Seismic Wave Propagation in Complex Geological Domains: From Site Effects in Ground Motion to Diffuse Fields in Passive Seismology			
7:00–8:00 PM	SSA Honors Reception			

Poster Sessions

- Advances and New Challenges in Investigating Seismic Site Response
- Advancing Earthquake Early Warning: Science, Technology and Engagement in the U.S. and Beyond
- Data-Driven and Computational Characterization of Non-Earthquake Seismoacoustic Sources
- Developing Data-Driven Methods in the AI Era: New Approaches to Earthquake Science
- Earthquake Ground Motions and Structural Response: Emerging Tools and Applications
- Earthquake Swarms Across the Earthquake Cycle: Precursors, Transients and Aftereffects
- ESC-SSA Joint Session: Interpreting Volcanic Unrest and Eruption Data for Effective Crisis Management
- Evolving Frontiers in Explosion Monitoring and Source Physics
- International Collaboration to Advance Earthquake Science and Disaster Response
- The Landscape Record of Earthquakes and Faulting
- Linking Subduction Zone Processes and Cascading Hazards in Alaska, Cascadia, Chile and Beyond
- Mechanisms and Seismogenic Structure for Large Continental Earthquakes
- New Developments in Earthquake Rupture Physics For Source Characterization and Ground Motion Modeling
- Recent Contributions of Social Science Research to Understanding Earthquakes
- Seismotectonics of Southern and Baja California
- Source Properties of Microearthquakes: Insights from Laboratory, Induced and Natural Events
- SSJ-SSOC-SSA Joint Session: From Slow to Fast Earthquakes: Bridging the Spectrum of Fault Slip

Friday, 17 April

Oral Sessions

Time	*Ballroom A*	*Ballroom B*	*Ballroom C*	*Ballroom D*
8:00–9:15 AM	On the State of Knowledge/Art/Practice for mHVSR Analyses; A Prelude to the ESG7-COSMOS mHVSR Pre-Event Forum	From Drilling to Ground Shaking: Mechanisms, Monitoring and Mitigation of Induced Earthquakes	Generating, Calibrating and Validating Multi-Scale Seismic Velocity Models	Advancing the U.S. Geological Survey National Seismic Hazard Models
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	On the State of Knowledge/Art/Practice for mHVSR Analyses; A Prelude to the ESG7-COSMOS mHVSR Pre-Event Forum	From Drilling to Ground Shaking: Mechanisms, Monitoring and Mitigation of Induced Earthquakes	Generating, Calibrating and Validating Multi-Scale Seismic Velocity Models	Advancing the U.S. Geological Survey National Seismic Hazard Models
11:45 AM–2:00 PM	Lunch Break			
2:00–3:15 PM		SSJ-SSOC-SSA Joint Session: Lessons from Recent Major Earthquake Sequences Around the World	Earthquake Rupture Hazard and Forecasts from Integration of Paleoseismic Datasets	Advancing the U.S. Geological Survey National Seismic Hazard Models
3:15–4:30 PM	Poster Break			
4:30–5:45 PM		SSJ-SSOC-SSA Joint Session: Lessons from Recent Major Earthquake Sequences Around the World		

Time	*Ballroom E*	*Ballroom F*	*Ballroom G*	*Ballroom H*
8:00–9:15 AM	Fiber-Optic Sensing Applications in Seismology and Environmental Science	Geophysical Perspectives on Volcanic Systems: Seismicity, Structure and Dynamics		Observation and Analysis of Topography and Deformation: Relating Earthquakes to Cascading Hazards
9:15–10:30 AM	Poster Break			
10:30–11:45 AM	Fiber-Optic Sensing Applications in Seismology and Environmental Science	Geophysical Perspectives on Volcanic Systems: Seismicity, Structure and Dynamics	New Frontiers in Seismic Observations and Modeling with Innovative Methods and Emerging Data on Earth and Other Planets	Constraining GMMs via Physics-Based Simulations and Complementary Observations: Integration and Practice
11:45 AM–2:00 PM	Lunch Break			
2:00–3:15 PM	Fiber-Optic Sensing Applications in Seismology and Environmental Science	Action at a Distance: Understanding Seismic Triggering	New Frontiers in Seismic Observations and Modeling with Innovative Methods and Emerging Data on Earth and Other Planets	Constraining GMMs via Physics-Based Simulations and Complementary Observations: Integration and Practice
3:15–4:30 PM	Poster Break			
4:30–5:45 PM	Fiber-Optic Sensing Applications in Seismology and Environmental Science	Southern California Seismicity: Past, Present and Future	New Frontiers in Seismic Observations and Modeling with Innovative Methods and Emerging Data on Earth and Other Planets	Constraining GMMs via Physics-Based Simulations and Complementary Observations: Integration and Practice

Poster Sessions

- Action at a Distance: Understanding Seismic Triggering
- Advancing the U.S. Geological Survey National Seismic Hazard Models
- Constraining GMMs via Physics-Based Simulations and Complementary Observations: Integration and Practice
- Data-Driven Advances in Liquefaction Hazard Analysis
- Earthquake Rupture Hazard and Forecasts from Integration of Paleoseismic Datasets
- Fiber-Optic Sensing Applications in Seismology and Environmental Science
- From Drilling to Ground Shaking: Mechanisms, Monitoring and Mitigation of Induced Earthquakes
- Generating, Calibrating and Validating Multi-Scale Seismic Velocity Models
- Geophysical Perspectives on Volcanic Systems: Seismicity, Structure and Dynamics
- New Frontiers in Seismic Observations and Modeling with Innovative Methods and Emerging Data on Earth and Other Planets
- Observation and Analysis of Topography and Deformation: Relating Earthquakes to Cascading Hazards
- On the State of Knowledge/Art/Practice for mHVSR Analyses; A Prelude to the ESG7-COSMOS mHVSR Pre-Event Forum
- Recent Research on Ground Motion Directionality
- Southern California Seismicity: Past, Present and Future
- SSJ-SSOC-SSA Joint Session: Lessons from Recent Major Earthquake Sequences Around the World