

2023 Highway Geology Symposium Schedule

Monday, August 14, 2023		Location
8:00 AM - 12:00 PM	Rockfall Fragmentation Demo (Pre-Registration Required)	Offsite: UW Tacoma
8:30 AM - 5:00 PM	Registration Open	Rotunda
9:00 AM - 4:00 PM	Exhibitor Setup	Pavilion BCEF
9:00 AM - 11:30 AM	FHWA Workshop: "What you Need to Know About Seismic Geophysics for Engineering Applications" (Pre-Registration Required)	Pavilion AG
1:00 PM - 5:00 PM	Transportation Research Board Session: "Geotechnical Data Sourcing and the Quality and Use of Models for Geotechnical Design" (Pre-Registration Required)	Pavilion AG
5:00 PM - 6:30 PM	National Steering Committee Meeting	Torcello/Burano
6:00 PM - 8:00 PM	Icebreaker Reception	Pavilion BCEF

Tuesday, August 15, 2023		Location
7:00 AM - 8:00 AM	Breakfast	Pavilion D
7:00 AM - 5:00 PM	Registration	Rotunda
8:00 AM - 8:50 AM	HGS Welcome & Opening Remarks	Pavilion AG
8:00 AM - 8:30 AM	Marc Fish WSDOT State Eng. Geologist & Kerri Woehler WSDOT Deputy Asst. Secretary	
8:30 AM - 8:50 AM	Washington Geology, Trevor Contreras, WA Geological Survey	
8:50 AM - 9:30 AM	Technical Talks - Session 1	Pavilion AG
8:50 AM - 9:10 AM	Innovative Geophysical Application for Bridge Foundation Design and Construction <i>Young Author: Ronan Jones</i>	
9:10 AM - 9:30 AM	Design and Construction of a Bottom-up Retaining Wall in Slickensided Red Bed Material <i>Young Author: Kirsten Grant</i>	
9:30 AM – 10:00 AM	Mid-Morning Break	Pavilion BCEF
10:00 AM – 12:00 PM	Technical Talks - Session 2	Pavilion AG
10:00 AM - 10:20 AM	Impacts of Weak Rock Units on Cut Slope Construction <i>Young Author: Justin Manning</i>	
10:20 AM - 10:40 AM	Comparative Analysis of Rock Slope Scaling Quantities and Crew Hours: A Strategic Approach for Standardizing the Practice <i>Young Author: Katelyn Card</i>	
10:40 AM - 11:00 AM	Seward Highway Rockfall Mitigation, Anchorage, Alaska <i>Young Author: Sebastian Dirringer</i>	
11:00 AM - 11:20 AM	A Multi-Phased Approach to Rockfall Mitigation at Don Pedro Dam: Lessons Learned for Critical Facilities and Roadways <i>Young Author: Joey Renner</i>	
11:20 AM - 11:40 AM	Quarrying a Hillslope in Waltham: Considerations and Lessons Learned from Stabilizing Rock in an Open Excavation <i>Young Author: Nolan Lescalleet</i>	
11:40 AM - 12:00 PM	Bolt Creek Fire: Post-Wildfire Debris Flow Risk Assessment and Barrier Design on US 2, Near Grotto, WA <i>Young Author: Cody Chaussee</i>	
12:00 PM – 1:00 PM	Lunch	Pavilion D
1:00 PM – 3:00 PM	Technical Talks - Session 3	Pavilion AG
1:00 PM - 1:20 PM	Emergency planning and mitigation for post-fire debris flows in Glenwood Canyon, Colorado <i>Young Author: Aliena Debelak</i>	
1:20 PM - 1:40 PM	Freemont Hall Landslide <i>Young Author: Jamie Cravens</i>	

1:40 PM - 2:00 PM	Landslide Study and Final Repair Design Route 3 Randolph County, Missouri <i>Author: John Szturo</i>	
2:00 PM - 2:20 PM	The SR112 / Clallam Bay Landslide(s) - Characterization and Mitigation <i>Author: Gabriel Taylor</i>	
2:20 PM - 2:40 PM	State Route 112: Landslide Alley – Striving for Resiliency <i>Author: Tom Badger</i>	
2:40 PM - 3:00 PM	Raised Draperies - Defining Hybrid Barriers and Attenuators by Application <i>Author: John Duffy</i>	
3:00 PM – 3:30 PM	Afternoon Break	Pavilion BCEF
3:30 PM – 4:40 PM	Technical Talks - Session 4	Pavilion AG
3:30 PM - 3:50 PM	How To Develop Rockslope Mitigation For Very Large Roadway-Dipping Blocks Along an Interstate Highway <i>Author: Stephen Newman</i>	
3:50 PM - 4:10 PM	"What If the Rock Only Threatens to Fall?" Emergency Response to a Decoupled Cliff Face in Washington State <i>Author: Eric Smith</i>	
4:30 PM - 4:50 PM	I-90 Rock Slopes: A Retrospective of the Snoqualmie Pass Project <i>Author: Norm Norrish</i>	
4:40 PM - 5:00 PM	Mt. Rainier Field Trip Preview	Pavilion AG
6:00 PM – 8:00 PM	Sailing Cruise on Lady Washington (Pre-Registration Required)	Offsite

Wednesday, August 16, 2023		Location
7:30 AM - 8:00 AM	Grab N' Go Breakfast	Pavilion Pre-Function
8:00 AM	Board Buses for HGS Field Tour	
8:00 AM - 6:00 PM	HGS Field Tour to Mount Rainier National Park	

Thursday, August 17, 2023		Location
7:00 AM - 8:00 AM	Breakfast	Pavilion D
7:00 AM - 5:00 PM	Registration	Rotunda
8:00 AM - 5:00 PM	Exhibits Open	Pavilion BCEF
11:00 AM - 5:00 PM	Companion Activities	Offsite: 7 Seas Brewery & Museum of Glass
8:00 AM - 10:00 AM	Technical Talks - Session 5	Pavilion AG
8:00 AM - 8:20 AM	Climate Resilience and Infrastructure Adaptation on California's National Forests <i>Author: Gordon Keller</i>	
8:20 AM - 8:40 AM	Geohazard Management on Colorado SH 133 From Planning to Mitigation <i>Author: Randy Post</i>	
8:40 AM - 9:00 AM	The State of Measurement While Drilling for the Washington State Department of Transportation <i>Author: Mike Mulhern</i>	
9:00 AM - 9:20 AM	Advancing Subsurface Investigations Beyond the Borehole with Passive Seismic Horizontal-to-Vertical Spectral Ratio and Electromagnetic Geophysical Methods at Transportation Infrastructure Sites in New Hampshire <i>Author: J.R. Degnan</i>	
9:20 AM - 9:40 AM	Non-destructive Surface Wave Geophysics Characterizes Salt Dissolution 140m Under US Highway 50 at Brandy Lake, Reno County, Kansas <i>Author: Johari Pannalal</i>	
9:40 AM - 10:00 AM	Mitigation Alternatives for Salt Dissolution Subsidence Impacting US Highway 50 at Brandy Lake, Reno County, Kansas <i>Author: Jeff Keaton</i>	
10:00 AM – 10:30 AM	Mid-Morning Break	Pavilion BCEF

10:30 AM – 11:50 AM	Technical Talks - Session 6	Pavilion AG
10:30 AM - 10:50 AM	Using State-of-the-Art Technologies and Tools for Geotechnical Investigation and Design <i>Author: Brian Collings</i>	
10:50 AM - 11:10 AM	The Development and Utilization of a Cloud-Based Database and Visualization App for Pile Results and Design: PileTrac <i>Author: Kyle Halverson</i>	
11:10 AM - 11:30 AM	Pavement Bump at the Bridge End Elimination <i>Author: Jeremiah Kokes</i>	
11:30 AM - 11:50 AM	US 460 Bridges over Marrowbone Creek, Pond Creek and Russell Fork River <i>Author: Tony Beckham</i>	
11:50 AM – 1:00 PM	Lunch	Pavilion D
1:00 PM – 3:00 PM	Technical Talks - Session 7	Pavilion AG
1:00 PM - 1:20 PM	Taking into Account the Fragmentation and Variability of Rockfall and the Third Dimension in Rockfall Barrier Design <i>Author: Time Shevlin</i>	
1:20 PM - 1:40 PM	Introducing A New Impact Alert System for Rockfall Barriers <i>Author: Sage Evans</i>	
1:40 PM - 2:00 PM	The Geohazard Pro must know "Section 262 Slope Scaling" <i>Author: Todd Hansen</i>	
2:00 PM - 2:20 PM	Rock Stabilization at Pompeys Pillar National Monument: The Use of Numerical Modeling to Analyze Risk of Toppling Failure <i>Author: Anya Brose</i>	
2:20 PM - 2:40 PM	Padden Creek I-5 Stream Crossing <i>Author: Mark Rose</i>	
2:40 PM - 3:00 PM	The Erodibility Index in Washington State's Intermediate Geomaterials: The Need for a Practical Tool <i>Author: Robert Humphries</i>	
3:00 PM – 3:30 PM	Afternoon Break	Pavilion BCEF
3:30 PM – 5:30 PM	Technical Talks - Session 8	Pavilion AG
3:30 PM - 3:50 PM	Accelerating the Transition to Digital Deliverables <i>Author: Katie Aguilar</i>	
3:50 PM - 4:10 PM	GIS Enterprise-based Prototype Erosion and Slope Stability Screening Tool for Transportation Infrastructure Management <i>Author: Bin Wang</i>	
4:10 PM - 4:30 PM	Integrating Field Data with Physics Engine Simulations of Fragmental Rockfalls <i>Author: R. MacPhail</i>	
4:30 PM - 4:50 PM	Emergency Response and Cures for Karst on Chemical Road <i>Author: Sarah McInnes</i>	
4:50 PM - 5:10 PM	A Comprehensive Approach to Rock Slope Design Solutions along NC-88 in Ashe County, North Carolina <i>Author: Bret Watkins</i>	
5:10 PM - 5:30 PM	Hybrid Design Approach for Anchored Wire Mesh: Towards A Displacement Based Design <i>Author: Lucas Martins</i>	
5:30 PM – 6:30 PM	Student Poster Social	Rotunda
6:30 PM – 9:00 PM	HGS Closing Banquet Jon Major, Cascades Volcano Observatory, Volcanic Hazards of the Cascades	Pavilion D