

2020 NIST Disaster Resilience Symposium



Agenda

Dates: July 28 - July 29, 2020

ET	CT	MT	PT	No.	Day 1: July 28, 2020						
10:15	9:15	8:15	7:15		Opening Remarks from the Director of the Engineering Laboratory					Howard Harary (NIST)	
10:30	9:30	8:30	7:30	1-Key	<i>From Disasters to Events – the role of WUI Fire Resilience</i>					Birgitte Messerschmidt (National Fire Protection Association)	
11:30	10:30	9:30	8:30	30 min break							
Concurrent Sessions				Day 1 Session 1							
				No.	Track 1: WUI		Speaker	No.	Track 2: Earthquake		Speaker
				Moderator: Jiann Yang				Moderators: Steven McCabe & Chris Segura			
12	11	10	9	16-1	<i>Imaging pyrometry of smoldering wood embers</i>		Peter Sunderland (University of Maryland)	18-5	<i>Seismic Rehabilitation of Existing Unreinforced Masonry Buildings</i>		Andreas Stavridis (Research Foundation for SUNY)
12:30	11:30	10:30	9:30	16-2	<i>Development of Methodology for Determination of Ignition Propensity by Firebrands in Wildland-Urban Interface</i>		Babak Shotorban (University of Alabama, Huntsville)	18-6	<i>Designing for and Assessing Functional Recovery in Seismic Retrofit of Existing Concrete Buildings: A Framework</i>		Abbie B. Liel, Maria Koliou (University of Colorado / Texas A&M)
1	12	11	10	16-3	<i>Improving Disaster Resilience by Quantifying WUI Community Ember Exposure</i>		Dac Nguyen, Nigel Kaye (Clemson University)	18-7	<i>Seismic Assessment and Retrofit Methods for Existing Non-Ductile Reinforced Concrete Wall Structures</i>		Juan Murcia-Delso, Ioannis Koutromanos (University of Texas at Austin / Virginia Tech)
1:30	12:30	11:30	10:30	1 hr break							

					Day 1 Session 2				
ET	CT	MT	PT	No.	Track 1: WUI	Speaker	No.	Track 2: Earthquake	Speaker
				<u>Moderator: Eric Link</u>			<u>Moderators: Steven McCabe & Chris Segura</u>		
2:30	1:30	12:30	11:30	18-1	<i>Assessing long-range firebrand impingement rates in recent WUI wildfire events</i>	Janice Coen (University Corporation for Atmospheric Research)	16-5	<i>Liquefaction-Targeted Ground Motion Parameters</i>	Steven Kramer, Andrew Makdisi (University of Washington)
3	2	1	12	18-2	<i>Development of a Fundamental Model for Ignition of Structural Wildland-Urban Interface (WUI) Fuels Subjected to Firebrand Attack</i>	Michael Gollner, Stanislav Stoliarov (University of California, Berkeley / University of Maryland)	16-6	<i>Decision-Oriented Column Simulation Capabilities for Enhancing Disaster Resilience of Reinforced Concrete Buildings</i>	Wassim Ghannoum, Adolfo Matamoros, Sergio Brena (University of Texas, San Antonio / UMass Amherst)
3:30	2:30	1:30	12:30	18-3	<i>Firebrand Material Ignition Conditions & Assessment Method Development</i>	Brian Lattimer, Jonathan Hodges (Virginia Tech / Jensen Hughes)	16-9	<i>Aging Effects in the Seismic Performance of RC Structures</i>	Petros Sideris, Mija Hubler (Texas A&M / University of Colorado-Boulder)
4	3	2	1	<i>30 min break</i>					
					Day 1 Session 3				
ET	CT	MT	PT	No.	Track 1: DFS	Speaker	No.	Track 2: Earthquake	Speaker
				<u>Moderator: Maria Dillard</u>			<u>Moderators: Jay Harris & Chris Segura</u>		
4:30	3:30	2:30	1:30	16-4	<i>Improving Disaster Resilience Through Scientific Data Collection with UAV Swarms</i>	Falko Kuester (University of California, San Diego)	16-8	<i>Seismic Assessment, Retrofit Strategies and Policy Implications for Vulnerable Existing Steel Buildings</i>	Gregory Deierlein (Stanford University)
5	4	3	2	18-4	<i>Leveraging Uncertain Disaster Field Data for Community-Scale Assessment of Connected Buildings and Lifelines</i>	Iris Tien (Georgia Tech Research Corporation)	16-7	<i>Resilience of Steel Moment Frame Systems with Deep Slender Column Sections</i>	Jason McCormick (University of Michigan)
5:30	4:30	3:30	2:30	End Day 1					

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ET	CT	MT	PT	No.	Day 2: July 29, 2020	
11	10	9	8	2-Key	<i>Perspectives from 40 Years of Tornado Research</i>	Erik Rasmussen (Cooperative Institute for Mesoscale Meteorological Studies)
12	11	10	9	<i>1 hr break</i>		
Day 2 Session 1						
Track 3: Wind						
Speaker						
<u>Moderator: Scott Weaver</u>						
1	12	11	10	18-8	<i>Measurement of Near-Surface Pressure, Wind and Wind-Induced Load Characteristics Using Novel Sensors in Thunderstorm, Tornado, and Tornado-Like Environments</i>	Franklin T. Lombardo (University of Illinois)
1:30	12:30	11:30	10:30	18-9	<i>Spatiotemporal Maps of Damaging Winds from Integrated Remote and In Situ Observations</i>	Michael Biggerstaff (University of Oklahoma)
2	1	12	11	18-10	<i>Wireless Sensor Network (WSN) System and LIDAR Experiments for the Characterization of Strong Wind Loads on Non-Structural Components and Near-Surface Wind Profiles</i>	Chelakara Subramanian, Jean-Paul Pinelli, Steven Lazarus (Florida Institute of Technology)
2:30	1:30	12:30	11:30	<i>1 hr break</i>		

					Day 2 Session 2	
ET	CT	MT	PT	No.	Track 3: Wind	Speaker
					<u>Moderator: Marc Levitan</u>	
3:30	2:30	1:30	12:30	18-11	<i>Innovative Measurement and Modeling of Dynamical Social and Health Effects of Windstorms</i>	Daan Liang (University of Alabama)
4	3	2	1	18-12	<i>4-D Measurement and Modeling of Engineering-Relevant Windstorm Characteristics</i>	John Schroeder (Texas Tech University)
4:30	3:30	2:30	1:30	16-11	<i>Development of Tornado Design Criteria for Buildings and Shelters Subject to Tornado Induced Loads</i>	Peter Vickery (Applied Research Associates Inc.)
5	4	3	2	16-10	<i>Coastal Inundation Events in Developed Regions</i>	Andrew Kennedy (University of Notre Dame)
5:30	4:30	3:30	2:30	End Day 2		