

CSDMS 2024 Annual Meeting - *“Coastlines, critical zones, and cascading hazards: Modeling dynamic interfaces from deep time to human time”*

May 14-16, 2024

Montclair State University, Conference Center, University Hall – 7th Floor, 1 Normal Avenue, Montclair, NJ 07073

******All times provided in Eastern Daylight Time**

Tuesday, May 14, 2024

Time	Session	Presenter	Topic
9:00AM	Welcome (Main Ballroom - 7th flr)	Lora Billings, Dean, College of Science and Mathematics, MSU	Welcome
9:05AM	Introduction	Paola Passalacqua, U Texas, Austin	Thematic Introduction
9:15AM	Community Updates	Greg Tucker, CSDMS Exec. Director	State of CSDMS
9:35 AM	Plenary Keynote (Main Ballroom - 7th flr)	Robert Kopp, Rutgers U	<i>Co-producing advances in natural/human coastal climate systems research and coastal climate adaptation services: the Megalopolitan Coastal Transformation Hub (MACH)</i>
9:55AM	Plenary Keynote	Neil Ganju, USGS	<i>Getting Meaning from Models: Lessons from Salt Marsh Geomorphic Modeling</i>
10:15AM	Plenary Keynote	Chaopeng Shen, Penn State U	<i>Differentiable Modeling to Unify Neural Networks and Process-based Modeling for Global Geosciences under Global Change</i>
10:35AM	Break		
11:00AM - 12:30PM	Breakout 1 (Main Ballroom - 7th flr)	Moira Zellner, Northeastern U	<i>CSDMS meet and greet - get to know your colleagues with Human Dimensions focus</i>
12:30PM - 1:30PM	Lunch		
1:30PM - 3:30PM	Clinic 1.1 (Rm 2002)	Jacky Austermann, Columbia U, LDEO	<i>Solving the Sea Level Equation: Earth’s Response to Ice and Ocean Load Changes</i>
	Clinic 1.2 (Rm 2004)	Todd Swannack & Candice Piercy, USACE	<i>Vegetation as Ecogeomorphic Features: Incorporating Vegetation into Earth Surface Models</i>
	Clinic 1.3 (Rm 2006)	Kelsea Best, Ohio State U	<i>Introduction to Agent-based Modeling for Socio-environmental Systems</i>
	Clinic 1.4 (Rm 2008)	Allen Lee, Arizona State U & Mark Piper, CSDMS IF	<i>The Last FAIR Clinic You’ll Ever Need</i>
	Clinic 1.5 (Rm 1020)	Caitlin Haedrich, North Carolina State U	<i>Coastal Evolution Analysis and Inundation Modeling with GRASS GIS</i>
3:30PM	Break		
3:45PM - 3:55PM	E-Pubs Lightning Talk		
3:55PM - 6:00PM	Poster Session A		

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Wednesday, May 15, 2024

Time	Session	Presenter	Topic
9:00AM	Welcome	Moderator - Albert Kettner, CSDMS IF	Welcome
9:05 AM	Plenary Keynote (Main BR - 7th flr)	Julia Hopkins, Northeastern U	<i>Adapting Urban Coastlines to Climate Change: Using Models to Understand the Potential and Pitfalls of Nature-based Solutions</i>
9:25AM	Plenary Keynote	Bhavna Arora, Lawrence Berkeley National Lab	<i>Modeling Approaches for Providing Water and Energy Solutions to the World</i>
9:45AM	Plenary Keynote	Amilcare Porporato, Princeton U	<i>On the Practical Importance of Theory in Landscape Evolution Models</i>
10:05AM	Plenary Student Keynote	Sebrian Beselly, IHE/TU Delft	<i>Simulating Mangrove-Mudflat Dynamics with a Hybrid Eco-Hydro-Morphodynamic Model</i>
10:25AM	Break		
11:00AM - 12:30PM	Breakout 1 (Rm 1020)	Group Meetings	<i>Terrestrial WG, Geodynamics, Hydrology and CZ FRGs</i>
	Breakout 2 (Main BR - 7th flr)	Group Meetings	<i>Marine and Coastal WGs, Chesapeake and Ecosystem Dynamics FRGs</i>
12:30PM - 1:30PM	Lunch		
1:30PM - 3:30PM	Clinic 2.1 (Rm 2002)	Moira Zellner, Northeastern U	<i>Fora.ai: A Participatory Modeling Platform to Reshape How we Collaborate for Climate and Social Impact</i>
	Clinic 2.2 (Rm 2004)	Samapriya Roy, MAXAR	<i>Introduction & Building with Google Earth Engine: Batteries Included</i>
	Clinic 2.3 (Rm 2008)	Katherine Anarde, North Carolina State U & Ian Reeves, USGS	<i>Parameterizing Human Dynamics in Geomorphic Models: Learning from Coastal Barrier Evolution Models</i>
	Clinic 2.4 (Rm 2006)	Eyal Marder, Indiana U	<i>Coupling Biological and Surface Processes in Landscape Evolution Models</i>
3:30PM	Break		
3:45PM - 6:00PM	Poster Session B		

Banquet 6:00PM to 8:30PM - MSU Conference Center

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Thursday, May 16, 2024

Time	Session	Presenter	Topic
9:00AM	Welcome	Moderator - Irina Overeem, CSDMS IF	Welcome and Awards
9:05 AM	Plenary Keynote (Main BR - 7th flr)	Tamara Pico, UCSC	<i>Rivers and Glacial Isostatic Adjustment</i>
9:25AM	Plenary Keynote	Kyle Mandli, Flatiron Institute at the Center for Computational Mathematics	<i>Measuring the Change in Coastal Flooding Risk from a Multi-hazard Perspective</i>
9:45AM	Plenary Keynote	Matt Ross, Colorado State U	<i>Tidy and... Tedious: Empowering Large-scale Watershed Science Through Inclusive, Welcoming Data Harmonization</i>
10:05AM	Plenary Student Keynote	Miles Reed, U Wisconsin, Madison	<i>Designing and Applying a Landscape Evolution Model Infused with Cosmogenic Nuclides for Geomorphic Insights</i>
10:25AM	Break		
11:00AM - 12:30PM	Breakout 1 (Main BR - 7th flr)	Greg Tucker, CSDMS IF	<i>Landlab Cafe (Landlab updates)</i>
	Breakout 2 (Rm 1020)	Scott Peckham, U Colorado, Boulder	<i>Cyber WG Meeting/Evolving Technologies Discussion</i>
	Office Hours (Main BR - 7th flr)	Eric Hutton, Mark Piper and Tian Gan, CSDMS IF, Allen Lee, Arizona State U	<i>Bring your questions to the CSDMS/COMSES Research Software Engineers</i>
12:30PM	Lunch		
1:30PM - 3:30PM	Clinic 3.1 (Rm 2002)	Kerry Callaghan, U Illinois, Chicago	<i>Using Fill-Spill-Merge to Understand and Analyze Landscape Depressions</i>
	Clinic 3.2 (Rm 2004)	Chang Liao and Matt Cooper, Pacific Northwest National Lab	<i>Mesh Independent Flow Directions Modeling Using HexWatershed 3.0</i>
	Clinic 3.3 (Rm 2006)	Randy LeVeque, U Washington	<i>New Features and Basic Usage of the GeoClaw Software for Depth-averaged Flow</i>
	Clinic 3.4 (Rm 1020)	Richard Barnes, UC Berkeley	<i>A Hands-on Workshop on GPU-based Landscape Evolution Modeling</i>
3:30PM	Break		
3:45PM - 4:45PM	Lightning Talks (Main BR - 7th flr)	CSDMS Summer Visiting Scholars	<i>Research progress updates</i>
4:45PM - 5:00PM	Closing Remarks and Adjourn	Greg Tucker, Executive Director, CSDMS IF	<i>Farewell and information about 2025 Annual Meeting in Boulder, CO</i>

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Friday, May 17- meeting by invitation

9:00AM-11:00AM	Location: CELS 110	CSDMS Executive Committee Meeting	(by invitation only - lunch will be served 11AM-12PM)
12:00PM - 2:00PM	Location: CELS 110	CSDMS Steering Committee Meeting	(by invitation only - lunch will be served 11AM-12PM)