

FORUM “MATH FOR INDUSTRY 2017”
 Responding to the Challenges of Climate Change: Exploiting, Harnessing and Enhancing the Opportunities of Clean Energy
East-West Center, University of Hawaii
 HAWAII IMIN INTERNATIONAL CONFERENCE CENTER AT JEFFERSON HALL

October 23, 2016 Monday Keoni Auditorium		October 24, 2016 Tuesday Keoni Auditorium		
9:15-9:45	UH-Manoa President D. Lassner Vice President Kyushu University M. Wakayama	9:50-10:20	Yichao Zhu <u>Multiscale Modelling of Materials: From Microstructures to Macro-Behaviour</u> <i>Department of Engineering Mechanics, Dalian University of Technology, China</i>	
9:45- 10:15	Sam ‘Ohukani‘ōhi‘a Gon III <u>Lessons from a thousand years of island sustainability</u> <i>Senior Scientist/Cultural Advisor The Nature Conservancy of Hawai‘i</i>			
10:20-10:50	Mark Glick <u>The Science of Energy Transformation – An Introduction to the 2017 Clean Energy & Climate Change Conference</u> <i>Hawaii Natural Energy Institute and Former State Energy Office Director, Hawaii</i>	10:30-11:20 <i>Plenary talk</i>	Petros Sofronis <u>Mathematical Challenges in Linking the Micro-with Macro-Scale Behavior of Materials in the Presence of Hydrogen</u> <i>Director of I2CNER Kyushu University</i>	
11:00-11:50 Plenary Talk	Michael Celia <u>Modeling Geological Storage of Carbon Dioxide with a Focus on Model Complexity and Practical Simulations</u> <i>Theodora Shelton Pitney Professor of Environmental Studies, Professor of Civil and Environmental Engineering, Princeton</i>	11:30-12:00	Jeff Mikulina <u>Accelerating Hawaii toward 100% clean energy</u> <i>Blue Planet Foundation</i>	
12:00-12:50 Plenary Talk	Seita Emori <u>Future projections and risk studies of climate change</u> <i>Head of the Center for Global Environmental Research(Climate Risk Assessment Section</i>	12:10-12:40	Dinh Hoa Nguyen <u>A novel optimization model for integrating carbon constraint with demand response and real-time pricing</u> <i>I2CNER & IMI, Kyushu University</i>	
LUNCH		LUNCH		
2:00-2:50 Plenary Talk	Kamal Oudrhiri <u>Gravity science as an effective tool for monitoring Earth’s freshwater resources</u> <i>NASA Radio Science Group Manager Deputy Project Manager for the Cold Atom Laboratory mission</i>	1:30-2:20 Plenary Talk	Yuji Ohya <u>Introduction of highly efficient multi-lens wind turbine and wind-solar tower based on new concepts</u> <i>Research Institute for Applied Mechanics, Kyushu University</i>	
3:00-3:30	Esther Widiasih <u>Climate change: a complex reality viewed from a simple math lens</u> <i>Mathematics, UH West Oahu</i>	2:30-3:20 Plenary Talk	Alejandro Jofré <u>Optimization and game theory in Energy markets</u> <i>Director of the Center for Mathematical Modeling Chile</i>	
3:30-4:00	COFFEE BREAK		COFFEE BREAK	
4:00-4:30	Tony Jakeman <u>Identifiability and uncertainty of hydrological models for predicting climate change impacts on water resources</u> <i>National Centre for Groundwater Research and Training The Australian National University</i>	3:30-5:30	POSTER Session	

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October 25, 2016 Wednesday Keoni Auditorium		October 26, 2016 Thursday Keoni Room	
9:30-10:20 Plenary Talk	Jason Leigh <u>Hawaii Advanced Visualization Environment Nexus</u> <i>Laboratory for Advanced Visualization & Applications UH Manoa</i>	9:30-10:20 Plenary Talk	Camilo Mora <u>We Punch Nature and It Will Punch Us Back: Human Impacts on Biodiversity and Their Feedback on People</u> <i>Department of Geography, University of Hawaii</i>
10:30-11:20 Plenary talk	David Wood <u>Helical Vortices: from the mathematics to wind turbine performance analysis</u> <i>Schulich Professor of Renewable Energy University of Calgary</i>	10:30-11:20 Plenary Talk	Rosalind Archer <u>Mathematical Tools to Support Geothermal Energy Production</u> <i>Mercury Chair in Geothermal Reservoir Engineering Department of Engineering Science University of Auckland, NZ</i>
11:30-12:00	John Jakeman <u>Quantifying uncertainty in sea-level change due to ice-sheet evolution in Greenland</u> <i>Sandia National Laboratories - Center for Computing Research</i>	11:30-12:00	Kaname Matsue <u>Mathematical treatment of flame dynamics toward foundation of combustion</u> <i>IMI & I2CNER, Kyushu University</i>
12:00-12:30	Ryan Perroy <u>Mapping and modeling three-dimensional coastal change on Hawai'i Island under rising sea level conditions</u> <i>Geography and environmental Sciences, UH Hilo</i>	12:00-12:30	Christina Karamperidou <u>The interacting time scales of tropical Pacific climate: modeling challenges and impacts”</u> <i>Department of Atmospheric Sciences UH Manoa</i>
LUNCH		LUNCH	
EXCURSION NORTH SHORE		1:30-2:20 Plenary Talk	Juliet Newson <u>Renewable Energy Education in Iceland</u> <i>Director of the energy lab Iceland</i>
		2:30-3:20 Plenary Talk	Steven Businger <u>The Impact of Global Warming on Recent Hurricanes</u> <i>Department of Atmospheric Sciences UH Manoa</i>
		3:30-3:45	Closing address Yasuhide Fukumoto