



Shukla Symposium on Predictability in the Midst of Chaos

A retrospective examination of the science of climate predictability
and a discussion of prospects for future research directions.

23-24 April 2015

Rockville, Maryland

Hilton Washington, DC / Rockville Hotel and Executive Meeting Center

<http://cola.gmu.edu/symposium/>

Sponsored by the Institute of Global Environment and Society
Center for Ocean-Land-Atmosphere Studies, George Mason University
National Oceanic and Atmospheric Administration

Program

Thursday, 23 April 2015:

7:30 a.m.	REGISTRATION AND BREAKFAST
8:30 a.m.	Jim Kinter (COLA/Mason): Introductions and welcoming remarks
Session 1: Predictability and Climate Dynamics (Chair: Mike Wallace)	
8:45 a.m.	Sir Brian Hoskins (Imperial College): <i>Week 1 Predictability in the Tropics from Equatorial Waves?</i>
9:05 a.m.	Dennis Hartmann (U. Washington): <i>Pacific Ocean SST and the Winter of 2014</i>
9:25 a.m.	Grant Branstator (NCAR): <i>Long-Lasting Mid-latitude Responses to Short-Lived Tropical Heating Events</i>
9:45 a.m.	Tim DelSole (COLA/Mason): <i>Multi-year Predictability</i>
10:05 a.m.	Bin Wang (U. Hawaii): <i>Decadal Predictability of the Land Monsoon Rainfall in the Northern Hemisphere</i>
10:25 a.m.	REFRESHMENTS
Session 2: Reanalysis, Climate Change and Climate Diagnostics (Chair: David Straus)	
11:00 a.m.	Eugenia Kalnay (U. Maryland): <i>Shukla, My Life-Long Mentor</i>
11:20 a.m.	Lennart Bengtsson (U. Reading): <i>How Well Can We Predict Climate Change - What Have We Learned from Several Decades of Progress in Numerical Weather Prediction?</i>
11:40 a.m.	Mike Wallace (U. Washington): <i>Time Variations in Tropical Rainfall: Three Perspectives</i>
12:00 p.m.	Kevin Trenberth (NCAR): <i>Reanalyses Continue to Get Better and are Useful for Diagnosing Feedbacks: a Case Study of Radiation vs. Temperatures</i>
12:20 p.m.	LUNCH
1:30 p.m.	Louis Uccellini (National Weather Service): <i>Evolving the NWS to Build a Weather-Ready Nation</i>
Keynote	
Session 3: Sub-seasonal to Seasonal Prediction (Chair: Ed Sarachik)	
2:00 p.m.	Session convenes
2:10 p.m.	Kathy Pegion (COLA/Mason): <i>Subseasonal Predictability and Prediction</i>
2:30 p.m.	Bohua Huang (COLA/Mason): <i>Multiple Analysis Initialization of Ocean on Seasonal Prediction of ENSO and Asian Monsoon</i>
2:50 p.m.	Cristiana Stan (COLA/Mason): <i>Super-Parameterization as a Tool for Sub-Seasonal Prediction</i>
3:10 p.m.	Ben Kirtman (U. Miami): <i>NMME: Shukla's Vision for Seasonal Prediction (Slowly) Realized</i>
3:30 p.m.	REFRESHMENTS

Session 4: Next Generation Models (Chair: Ed Schneider)	
4:00 p.m.	Dame Julia Slingo (Met Office): <i>From Global to Local, and From Weather and Climate to Environmental Risks and Impacts</i>
4:40 p.m.	Jim Hurrell (NCAR): <i>Strategic Priorities for NCAR: Development of Multi-Scale Simulation and Prediction Systems</i>
5:00 p.m.	V. Ramaswamy (GFDL): <i>Anthropogenic Species and Climate: Diagnosing the Past and Modeling of the 21st Century Climate Change</i>
5:20 p.m.	Tim Palmer (U. Oxford): <i>Greater Accuracy with Less Precision - A New Approach to Weather and Climate Prediction</i>
5:40 p.m.	Adjourn
6:00 p.m.	Icebreaker reception
7:00 p.m.	Banquet

Friday, 24 April 2015:

7:30 a.m.	BREAKFAST
8:30 p.m.	David Randall (Colorado State U.): <i>Cumulus Predictability</i>
PANEL DISCUSSION	
8:50 a.m.	Scientific and Institutional Challenges in Climate Research (Moderator: Kinter)
	PANELISTS (Cane, Fung, Goddard, Held, Philander, Slingo)
10:30 a.m.	REFRESHMENTS
Session 5: Asian Monsoon (Chair: Krishnamurthy)	
11:00 a.m.	Peter Webster (Georgia Tech): <i>70 Years of Monsoon Research and Shukla</i>
11:20 a.m.	Anjali Bamzai (NSF): <i>Our Evolving Understanding of the Snow-Monsoon Relationship</i>
11:40 a.m.	Bhupen Goswami (IISER): <i>Beyond ENSO: Exploring New Sources of Monsoon Predictability</i>
12:00 noon	Antonio Navarra (CMCC): <i>Is Climate Change Finished?</i>
12:20 noon	LUNCH
Session 6: Land-Biosphere-Atmosphere Interaction (Chair: Sellers)	
1:30 p.m.	Carlos Nobre (Ministry of Science, Technology & Innovation of Brazil): <i>The Future of the Amazon Forest</i>
1:50 p.m.	Paul Dirmeyer (COLA/Mason): <i>Stranger in a Strange Land Model</i>
2:10 p.m.	David Gutzler (U. New Mexico): <i>The Search for Seasonal Prediction Skill for the North American Monsoon</i>
2:30 p.m.	Inez Fung (UC Berkeley): <i>Leaky Buckets</i>
2:50 p.m.	Robert Dickinson (U. Texas): <i>Dynamic Mechanisms for Land to Suppress or Promote Precipitation</i>
3:10 p.m.	Closing remarks
3:30 p.m.	ADJOURN