UNIVERSITY of HAWAI'I MĀNOA

Department of Atmospheric Sciences & IPRC
Joint Seminar Announcement

Department of Atmospheric Sciences, S.O.E.S.T., University of Hawai'i at Mānoa
2525 Correa Road, HIG 350; Honolulu, HI 96822 ☎956-8775
&
International Pacific Research Center, S.O.E.S.T., University of Hawai'i at Mānoa
1680 East-West Road, POST 401; Honolulu, HI 96822 ☎956-5019

SCHOOL OF OCEAN AND EARTH SCIENCE AND TECHNOLOGY

SEMINAR TITLE:

Global monsoon responses to external forcing and internal feedback processes: A modern perspective

Professor Bin Wang
Department of Atmospheric Sciences
School of Ocean and Earth Science and Technology
University of Hawai'i at Mānoa

Date:	**Wednesday, August 31, 2016**
Refreshments:	**3:00pm at MSB courtyard**
	Free Cookies, Coffee & Tea Provided
	(Please Bring Your Own Cup)
Seminar Time:	**3:30pm**
Location:	**Marine Sciences Building, MSB 100**

Abstract:

In the first part of my talk I will discuss an emergent concept of Global Monsoon (GM). Monson precipitation is indispensable to life and civilization. Contrasting rainy summer and dry winter is a fundamental characteristic of monsoon. But why historically was monsoon defined by winds? How can we use rainfall to delineate monsoon domains? Are the monsoon domains defined by rainfall and winds consistent? How can we integrate the wind-based proxy (upwelling-induced productivity) and rain-based (rain-related $\delta^{18}O$) proxy data? What is the GM? Why do we concern with GM? How important is GM in driving atmospheric general circulation (Intertropical Convergence Zone, Hadley and Walker circulation, desert and subtropical high) and global hydrological cycle?

In the second part of my talk I will discuss what drives the recent trend in the Northern Hemisphere monsoon precipitation, how the GM responds to greenhouse gas forcing and solar-volcanic forcing, and what determine the interannual-multidecadal variability of GM, in particular, to what extent the internal feedback processes can generate coherent variability of regional monsoons.