Eugene Rasmusson Lectures

The Department of Atmospheric & Oceanic Science has launched these annual lectures to honor Emeritus Research Professor Eugene M. Rasmusson who joined the department in May 1986. Gene is known for his seminal analysis of the atmospheric hydrologic cycle, an effort begun during his doctoral studies at MIT under Victor Starr. Gene is, however, most well known for his observational description of ENSO. His characterization of the ocean-atmosphere state in the nascent, mature, and decaying ENSO phases fostered theoretical and numerical modeling of ENSO.

Gene has been honored with the Victor Starr lectureship at MIT, the George Benton lectureship at Johns Hopkins, and the Robert Horton lectureship at the American Meteorological Society. Gene received the Jule Charney award from the AMS in 1989. Gene is a member of the National Academy of Engineering, and an associate of the National Academy of Sciences.

Gene's community leadership (as AMS President) and scientific leadership at the National Research Council (including as CRC Chair) and NOAA has advanced climate monitoring, analysis, and prediction activities. The American Meteorological Society honored Gene with a named symposium in 2007.

2013 RASMUSSON LECTURER

John Michael Wallace

Attribution of Climate Trends in the Presence of Natural Variability

Professor of Atmospheric Sciences
University of Washington, Seattle

Member, National Academy of Sciences

28 March (Thursday), 2013
Lecture: 6:00pm; Reception: 5:00pm
Auditorium (Rm 2400), CSS Bldg.

UNIVERSITY OF MARYLAND

DEPARTMENT OF ATMOSPHERIC & OCEANIC SCIENCE

Abstract:

Spontaneous, internally-generated variability of the climate system is pervasive. On the multidecadal time scale it dominates the variability of surface air temperature averaged over extratropical land areas as large as the contiguous United States, limiting the degree of confidence that can be attached to climate change projection. The future trajectory of the real climate system is like that of an individual member of a large ensemble of numerical integrations run with a suite of different atmospheric initial conditions but with the same prescribed external forcing scenario. The member-to-member diversity of the trends is a measure of the irreducible uncertainty inherent in the projections, most of which is in response to diversity in the simulated atmospheric circulation trends. I will argue that in the face of such large uncertainties, more attention should be focused on climate change in the tropics and on the broader suite of environmental issues that impact food security and the viability of ecosystems.