

Join us

Northeastern University
College of Engineering

celebrates

NATIONAL ENGINEERS WEEK

February 17-23, 2018 #NUeweek2018

Thursday, February 22, 2018 | 103 Churchill | 3:00 pm

Hosted by Department of Civil and Environmental Engineering

Distinguished Seminar

Climate Variability and the Global Hydrologic Cycle: Efforts in Monitoring, Modeling, and Challenges in Forecast Changes



Soroosh SorooshianUniversity of California Irvine

The need for more efficient use and effective management of water resources is a critical global issue facing the 21st century. To be responsive to the requirements of water balance studies and development of more effective tools to address hydrologic hazards and manage water resources systems, scientists and engineers have become more reliant on the use of predictive models and stochastic methods.

Depending on the problem, the hydrometeorological information needed may range from hourly forecasts to seasonal to inter-annual, and to decadal to century. Regional climate models are used with longer time scales, ranging from seasons to decades while information from Numerical Weather Prediction (NWP) models are often employed to help with shorter time scale forecasts (days to weeks). This presentation introduces new data products based on the PERSIANN system developed at CHRS at UC Irvine.

Soroosh Sorooshian is a Distinguished Professor of Civil and Environmental Engineering and Earth System Science Departments and Director of the Center for Hydrometeorology & Remote Sensing (CHRS) at University of California Irvine. His area of expertise includes the interface of global hydrologic cycle, and climate system. He is a member of the U.S. National Academy of Engineering (NAE); the International Academy of Astronautics (IAA); and the World Academy of Sciences (TWAS). Among his other recent honors: recipient of the 2017 Ven Te Chow Award of the American Society of Civil Engineers (ASCE); named the 2014 Einstein Professor by the Chinese Academy of Sciences (CAS); recipient of the 2013 American Geophysical Union's (AGU) Robert E. Horton Medal; recipient of the 2010 4th Prince Sultan Bin Abdulaziz International Prize for Water Resources Management & Protection; and recipient of the NASA Distinguished Public Service Medal. He has served on numerous advisory committees, including those of NASA, NOAA, DOE, USDA, NSF, EPA, WMO and UNESCO and has testified to both U.S. House of Representatives and U.S. Senate Committees on issues related to water, climate and satellite programs.

This event is part of National Engineers Week, for the full schedule please visit northeastern.edu/neweek



Soroosh Sorooshian

Distinguished Professor
Civil and Environmental Engineering
Earth System Science
UNIVERSITY OF CALIFORNIA, IRVINE

Education

- PhD Engineering, University of California, Los Angeles, 1978
- Engineer Degree, Systems Engineering, University of California, Los Angeles, 1977
- M.S. Operations Research, University of California, Los Angeles, 1973
- B.S. Mechanical Engineering, CAL POLY, SAN LUIS OBISPO, 1971

Research Interests

- Hydrometeorology
- Water resources systems
- Climate studies
- Remote sensing
- Hydrologic cycle and water resources issues of arid and semi-arid zones
- Urban flooding

Selected Service and Awards

- Director, Center for Hydrometeorology and Remote Sensing
- Member, US National Academy of Engineering
- Member, International Academy of Astronautics
- Fellow, American Association for the Advancement of Science
- AGU Robert E. Horton Medalist, 2013