Satellite and Ground-Based Microwave Sensors & Radio Frequency Regulations

Abstract

This talk research work will discuss recent research in using satellite and ground-based microwaves sensors to study the Earth’s atmosphere and precipitation. Additionally, the talk will also cover the increasing importance of radio regulations for efficiently sharing radio spectrum between many users to minimize radio frequency interference (RFI) and benefit society.

Biography

Dr. Sandra Cruz-Pol is a Professor in the Department of Electrical and Computer Engineering at the University of Puerto Rico at Mayagüez (UPRM) Campus since 1991. She has also been a Program Director for the EARS (Enhancing Access to the Radio Spectrum) program at the National Science Foundation (NSF) and has served as a Spectrum Manager from 2014-15. She was also appointed as the NSF Representative to the IRAC and was a member of the US Delegation at ITU Radio Communication meetings in Geneva, Switzerland. Her focus interests include weather radars, antennas, microwave remote sensing of the Earth, and radio wave propagation. She was a member of National Academy of Sciences Committee on Radio Frequencies (CORF) from 2010 to 2014 and member of the NAS Active Spectrum Study for 2 years. She is a Senior Member of the IEEE, a member of the IEEE Geoscience and Remote Sensing Society, and a member of the TBP and PKP Honor Societies. She has also served as the Associate Editor for University Affairs for the IEEE GRSS Newsletter for 5 years and is currently directing the Green Campus Program and Cloud Microwave Measurements of Atmospheric Events (CLIMATE) Lab at UPRM. Dr. Cruz-Pol obtained her Ph.D. from Penn State University, her Masters from the University of Massachusetts at Amherst, and her Bachelors from UPRM, all in Electrical Engineering with Summa Cum Laude distinction.