



University of Illinois at Chicago, Electrical and Computer Engineering Department  
IEEE Antennas and Propagation & Microwave Theory and Techniques Societies

## **The Case for Fixed Location Spectrum Observatory Networks**

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**Vice Provost for Research, Illinois Institute of Technology**

**Friday, April 10, 11:00 AM**

Science and Engineering Offices Building, Room 1000  
851 South Morgan Street  
Chicago, IL 60607-7053

Host: Prof. Danilo Erricolo, [derric1@uic.edu](mailto:derric1@uic.edu)

### **Abstract**

Spectrum observation has become an increasingly important tool in the broader effort to more effectively manage the nation's increasingly valuable spectrum resource. The talk includes an introduction to the topic of spectrum observation reviewing the key parameters involved in producing useful spectrum occupancy information that is tailored to meet various measurement needs. The presentation will focus on both the speaker's experiences with fixed location Spectrum Observatory systems over the past decade and specifically those currently deployed at IIT's Wireless Networks and Communications Research Center (WiNCom). Future goals for expanding the scope and benefit of these systems will also be discussed including an invitation for others to engage in the effort. The goal of this work is to first contribute to the understanding of spectrum usage in Chicago and through this in depth understanding to improve the efficient and effective use of spectrum in the nation and in the world.

## Biography



Dennis A. Roberson is Vice Provost for Research and a Research Professor in Computer Science at Illinois Institute of Technology where he has over-all responsibility for IIT's research efforts and the university's relationships with its various corporate partners. He also serves as the focus for the implementation of IIT's Strategic Plan. Through these roles and his responsibility for the Jules F Knapp Entrepreneurship Center, he supports the successful initiation and growth of IIT related business ventures. He is a co-founder of IIT's Wireless Network and Communications Research Center (WiNCom) and a wireless networking educator.

He is also President and CEO of Roberson and Associates, LLC, an IIT spin-out consulting firm primarily focused on wireless technology and technology management serving government and commercial customers. He serves on the boards of several technology-based companies, Chairs the FCC's Technological Advisory Council and serves on the U.S. Commerce Spectrum Management Advisory Committee. He served as an Invited Expert on the President's Council of Advisors on Science and Technology Working Group on Spectrum Policy. Prior to IIT, he was EVP and CTO at Motorola. He had an extensive corporate career including major business / technology responsibilities at IBM, DEC (now part of HP), AT&T, and NCR. He is involved with a wide variety of technology, educational and youth organizations and serves as a frequent speaker at universities, companies, technical workshops, and conferences around the globe. Professor Roberson has BS degrees in Electrical Engineering and in Physics from Washington State University and a MSEE degree from Stanford.