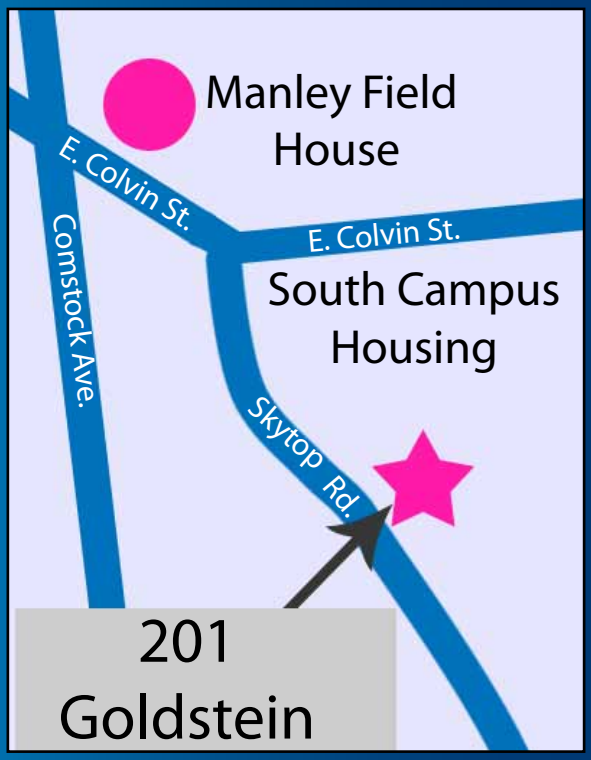
Wednesday, March 26th

6:00 - 7:00 pm

Syracuse University
Goldstein Student Center
Room 201



Dr. Parimi is a Director of Wireless Solutions Lab at SUNY Oswego. Prior to joining SUNY, he worked as a Director, Lambda4D, Senior Director at Newlans, Manager Advanced Technology at SI2 Technologies and Senior Antenna Engineer at Cobham Defense Electronic Systems. He served Northeastern University as a Research Associate Professor and Senior Research Scientist (2000-2005). He has developed many next gen GPS, Satcom, EW, and ISR communication and radar systems. Dr. Parimi published 50 research papers in peer reviewed journals, obtained 2 patents, and has given numerous invited talks at various industry, universities, DoD agencies, and conferences. He won as a Principal Investigator more than 20 DARPA, NSF, SBIR, STTR and BAA R&D Awards of $11M+. While at Cobham he was instrumental in capturing a $200M acquisition contract from the Army. Dr. Parimi has been widely recognized for his research and development in wideband analog signal processing, antennas/arrays and metamaterials. Science magazine selected his research on imaging by a flat lens published in Nature as one of its breakthrough papers (Science, December 2004). The American Physical Society listed his research on left-handed metamaterials in the "Highlights of the Year 2003" (APS News, Vol. 13, February 2004). The New Scientist, American Institute of Physics News, and Physics Today has quoted him for research on EM propagation in left-handed metamaterials (2003). He is Journal Referee for IEEE Transactions and Letters, IET, App. Physics Lett, Physical Review B (PRB) and Letters (PRL), JAP, JMMM and Review of Scientific Instruments.

IEEE

Advanced Metamaterials and Antennas for Next Gen Wireless Communication and Radar Systems

Pat V. Parimi, Ph.D.
Director Wireless Research Lab
State University of New York
Oswego, NY

Metamaterials are artificial structures that can be designed to exhibit specific electromagnetic properties not commonly found in nature. Effective permittivity and permeability of these metamaterials can be tailor made and used to control RF propagation in them. This presentation will discuss recent developments in metamaterials, and applications of electromagnetic band gap (EBG), frequency selective surface (FSS), and negative index metamaterials. The invention of metamaterials has already made a significant impact in wireless communications and optics and has the potential to revolutionize future wave electronics. Our recent research in different classes of metamaterials has led to a number of innovative wireless communication and radar components and sub-systems. The potential of the metamaterials will be demonstrated with a few example products: extremely low profile antennas/arrays, FSS for anti-jam systems, miniature phase shifter, true time delay lines and flat lenses.

For additional information contact Michael Enders: menders@ieee.org

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