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## Wireless Communication and Signal Processing

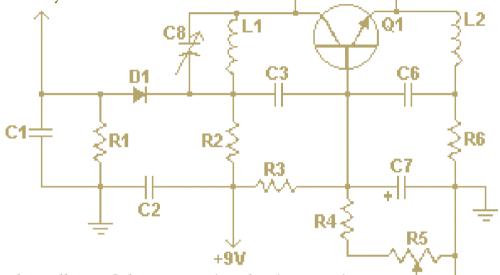
A Seminar by Dr. Hüseyin Arslan

Department of Electrical Engineering University of South Florida

Thursday March 13, 2008 12:00-13:30 p.m.

Light lunch will be served (after the talk)

Lecture Hall 143



oday's wireless services have come a long way since the rollout of the conventional voice-centric cellular systems. The demand for wireless access in voice and high data rate multi-media applications has been increasing. New generation wireless communication systems are aimed at accommodating this demand through better resource management and improved transmission technologies.

The objective of this seminar is to discuss the current research areas carried out in Wireless Communication and Signal Processing (WCSP) group of University of South Florida, Tampa. Cognitive radio, software defined radio, interference modeling/avoidance/cancellation in 4-G cellular systems, signal intelligence and multi-dimensional signal analysis, channel modeling and measurements in irregular and disaster areas, OFDMA and its applications to cognitive radio and 4G networks, cognitive locationing systems, underwater acoustic communications are some of the topics that will be covered in this seminar. In addition, some of the medical aspects of wireless communication will be discussed; positive and negative impact of wireless and radio waves on the health and medical science.

**Dr. Hüseyin Arslan** has received his PhD. degree in 1998 from Southern Methodist University (SMU), Dallas, Tx. From January 1998 to August 2002, he was with the research group of Ericsson Inc., NC, USA, where he was involved with several project related to 2G and 3G wireless cellular communication systems. Since August 2002, he has been with the Electrical Engineering Dept. of University of South Florida. He has also been working for Anritsu Company, Morgan Hill, CA (as a visiting professor during the summers of 2005 and 2006) as a part-time consulting since August 2005.

Dr. Arslan's research interests are related to advanced signal processing techniques at the physical layer, with cross-layer design for networking adaptivity and Quality of Service (QoS) control. He is interested in many forms of wireless technologies including cellular, wireless PAN/LAN/MANs, fixed wireless access, and specialized wireless data networks like wireless sensors networks and wireless telemetry. The current research interests are on UWB, OFDM based wireless technologies with emphasis on WIMAX and IMT-Advanced, and cognitive and software defined radio. He has served as technical program committee chair, technical program committee member, session and symposium organizer, and workshop chair in several IEEE conferences. He is a member of the editorial board for "Wireless Communication and Mobile Computing Journal" and "Research Letters in Communications". Dr. Arslan is a senior member of IEEE. He is a member of IEEE and the Association of Professional Engineer and Geoscientist of Canada (APEGBC). He co-authored a book on high performance computing systems and applications, and has many refereed journal and conference publications. His research interest includes wireless communications, scheduling algorithms, resource allocation, quality of service mechanisms, and processor system architectures.

