



Princeton University

**Department of Electrical Engineering
Information Sciences and Systems (ISS) Seminars**

Speaker: Rajiv Laroia
Date: Thursday, May 10, 2007
Time: 4:30pm
Room: B205 ~ EQuad
Title: Lessons Unlearned in Wireless

Abstract:

The talk deals with our experiences while designing the flash-OFDM system and will focus on things we had to learn or things we believed to be true when we started designing the wireless data system but had to unlearn during the process

Biography:

Rajiv Laroia is the founder of Flarion. As the Company's CTO, he is responsible for setting product direction and overseeing all R&D activities. He is an expert in CDMA, TDMA and other cellular multiple access technologies and is intimately familiar with current and next generation of wireless standards including IS-95, UMTS, CDMA 2000, IS-136, GSM and EDGE.

Dr. Laroia has a very broad background that spans wireless communication, data transmission, information theory, VLSI design and architecture, analog mixed-signal and RF circuit design, high-speed AD/DA data converters, speech image and video compression. He is well known and respected in the professional and academic community and is regularly invited for seminars at top universities.

Prior to launching Flarion, Dr. Laroia was with Lucent Technologies Bell Laboratories since 1992 when he joined the prestigious Mathematical Sciences Research Center. In 1997, he became head of Bell Labs' Digital Communications Research Department in the Wireless Research Center where he and his team started to develop flash-OFDM technology based wireless data system. His years at Bell Labs have generated numerous publications and over 35 patents (granted and applied) with total patent licensing revenue in excess of \$25 million.

He received his Ph.D. and Master's degrees from the University of Maryland, College Park in 1992 and 1989 and a bachelor's degree in 1985 from the Indian Institute of Technology, Delhi-all in electrical engineering. Parts of his Ph.D. research are taught in advanced communication courses in most prominent universities. His thesis also contributed to V.34, the ITU voice-band modem international standard and led to a patent that has generated over \$2 million for the University of Maryland, College Park. He was the recipient of the Best Graduate Student of the Year Award at the University of Maryland in 1992. From 1994 to 1997 he was the associate editor for IEEE transactions on information theory. Dr. Laroia is a Fellow of the IEEE.