



**Princeton University**

**Department of Electrical Engineering**

**Information Sciences and Systems (ISS)  
Seminar**

**Speaker:** Larry Pearlstein & Richard Selvaggi, AMD

**Date:** Thursday, March 15, 2007

**Time:** 4:30pm

**Room:** B205 ~ Equad

**Title:** Advances in Digital Television Technology

**ABSTRACT:**

The last three decades have seen dramatic changes in the world of consumer electronics. The 80's saw the rise of the personal computer. The 90's were marked by the explosion of the Internet. The Aught's have been the decade of digital entertainment - iPods, cell-phones, digital cameras and flat panel TV.

The key enabler of consumer electronics products has been the steady advance of IC technology - bringing higher clock speeds and lower cost per transistor. For example, the very idea of a System on a Chip (SoC) was considered radical in the 90's, but today virtual all (non-PC) consumer electronics products are based on SoC's.

This talk will provide insight into the current state of Digital Television (DTV) technology. The speaker will focus on his personal experiences in the development of AMD (ATI) SoC's, including MPEG Audio/Video Encoder chips, and the Xilleon family of Digital Television SoC's.

The talk will conclude with a consideration of some fertile areas for research, which might be of value in future Digital Television products.