The Center for Magnetic Recording Research
&
The California Institute of Telecommunications
and Information Technology
&
The Information Theory and Applications Center

present the
8th Annual Shannon Memorial Lecture

Friday, April 30, 2010

2:30 PM – Pre-Lecture Reception at CMRR
4:00 PM – Lecture in Calit2 Auditorium – Atkinson Hall

Dr. Andrew Viterbi
2010 IEEE Medal of Honor Recipient

will present a lecture entitled

Markov, Wiener and Shannon: a Progression

A.A. Markov proposed and developed a statistical concept which suggests that future action should depend only on the current state of the system or process. Exploitation of the statistical properties of Markov processes has produced important results in optimum linear (Wiener) filtering, with principal applications to navigation, tracking, orbit determination and even economics; and in finite-state sequence determination, with applications to Information (Shannon) theory, digital communication, voice and optical character recognition, data recording, search engines, and DNA sequence analysis. Both areas will be discussed and compared, as well as the merits of any societal implications of the Markov concept.

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