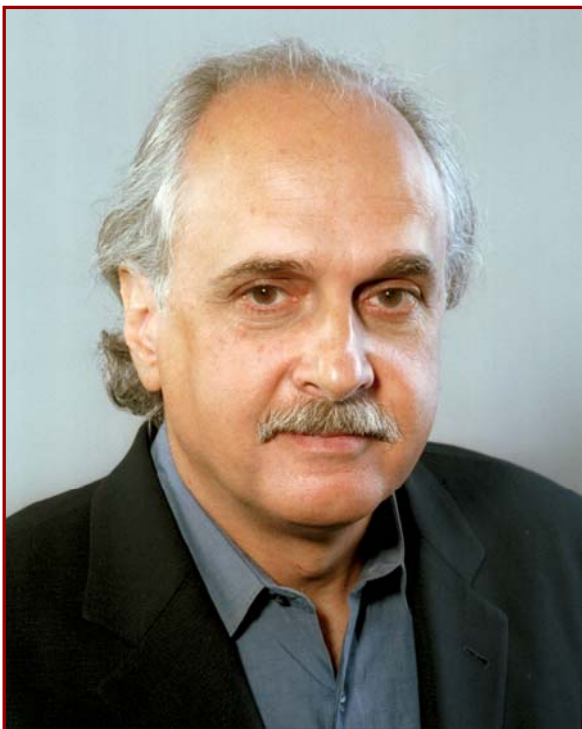


THURSDAY
OCTOBER 28, 2004

Scaife Hall Auditorium
Room 125

4:00 PM
Refreshments—3:30 PM



Professor Yannis Tsividis
COLUMBIA UNIVERSITY

Yannis Tsividis is Charles Batchelor Memorial Professor at Columbia University. His research involves mixed-signal integrated circuits and signal processing. He has received several research awards, including the IEEE Baker Prize and the L. Winner Outstanding Paper Award of the International Solid-State Circuits Conference. He received Columbia's Presidential Award for Outstanding Teaching in 2003.

Patrick Yue, ECE Seminar Host
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For more information:
<http://www.ece.cmu.edu/seminar>

CONTINUOUS-TIME DIGITAL FILTERS – AND OTHER MIXED-DOMAIN PROCESSORS

We review several signal processors which combine domains usually kept separate. Such processors include linear analog filters which use nonlinear signal decompositions, processors in which digital waveforms are processed directly with analog circuits, and continuous-time digital filters.

We will spend most of the time on the last type, in which the binary waveforms used are functions of continuous-time; no sampling is used in converting the signal from analog to digital form, and thus there is no aliasing of signal or of quantization error. This can result in much smaller in-band quantization error than is possible with sampling and discrete-time digital signal processing.