

THURSDAY
NOVEMBER 4, 2004

Scaife Hall Auditorium
Room 125

4:00 PM
Refreshments—3:30 PM



Demetri Psaltis

CALIFORNIA INSTITUTE OF TECHNOLOGY

Demetri Psaltis is the Thomas G. Myers Professor of Electrical Engineering at Caltech in Pasadena, California. He was educated at Carnegie-Mellon University where he received the Bachelor of Science degree in Electrical Engineering and Economics in 1974, the Master's in 1975, and the PhD in Electrical Engineering in 1977. In 1980, he joined the faculty at the California Institute of Technology in Pasadena, California, and he served as Executive Officer for the Computation and Neural Systems department from 1992-1996. From 1996 until 1999 he was the Director of the National Science Foundation research center on Neuromorphic Systems Engineering at Caltech. He is currently director of the Center for Optofluidic Integration at Caltech. His current research interests are in optical information processing, holography, nonlinear optics, and nanophotonics. He has authored or co-authored over 400 publications in these areas. Dr. Psaltis is a fellow of the Optical Society of America and the Society for Photo-optical Systems Engineering (SPIE). He received the International Commission of Optics Prize and the Humboldt Award. He is the chairman and co-founder of Ondax.

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

OPTICAL COMPUTING: PAST AND FUTURE

The successful application of optics in information systems such as communications and memories is in sharp contrast with its failure in computing.

In this talk we will discuss the underlying reasons for this. We will also look towards the future and speculate on the role of optics in future computing technologies using nanophotonics and femtosecond nonlinear optics.