Optical Technologies in Router Design

by Dimitrios Stiliadis, Bell Labs

Date: March 25, 2004 (Thursday)
Time: 6:15 pm (refreshment starts at 6:00 pm)
Place: 202 ECEC, NJIT

About the Speaker

Dimitrios Stiliadis received his Ph.D and M.S. degrees in Computer Engineering from the University of California at Santa Cruz, in 1996 and 1994 respectively. Since 1996, he has been with the High-Speed Networks Research Department of Bell Laboratories, where he is currently a Distinguished Member of Technical Staff. During these years he has been leading the architecture of several generations of packet switching equipment. His recent research has been in issues related to traffic management, switch scheduling, and applications of optical technologies to packet networks. He is a co-recipient of the 1998 IEEE Fred W. Ellersik Award.

About the Talk

Next-generation switches and routers may rely on optical technologies to overcome cost, power, space and scalability problems that arise in sizing traditional electrical routers into the multi-terabit regime. However, several technological and architectural problems must be overcome to be able to use such an approach. In this talk we will cover a range of optical technologies that are available today, and demonstrate how we can design router architectures that take advantage of the advantages and limitations of optical components.

Sponsors: **IEEE Communications Society North Jersey Chapter**
                NJIT Department of Electrical and Computer Engineering