Scaling Optical Packet Switches to Large Number of Ports

Prof. H.J.S. Dorren
Science Director, COBRA Research Institute
Eindhoven University of Technology, Department of Electrical Engineering,
The Netherlands

Abstract
The impact of switching architectures that scale to thousands of ingress and egress ports is investigated in relation to node control. An example of an architecture that is highly scalable while supporting transmission over highly loaded links at the expense of low latency is given. Examples of integrated devices that support such architectures are also given and system performance is evaluated in the context of high-speed switching experiments.

Biography
H.J.S. (Harmen) Dorren received his M.Sc. degree in theoretical physics in 1991 and the Ph.D. degree in 1995, both from Utrecht University, Utrecht, Netherlands. He joined Eindhoven University of Technology, Eindhoven, the Netherlands in 1996 where he presently serves as a full professor and as the scientific director of the COBRA Research Institute. Between 1996 and 1999, he was also a part-time researcher in KPN-Research in the Netherlands. In 2002 he was also for three months a visiting researcher at the National Institute of Industrial Science and Technology (AIST) in Tsukuba in Japan. His research interests include optical packet switching, digital optical signal processing and ultrafast photonics. Prof. Dorren (co-)authored over 380 journal papers and conference proceedings and served as an associate editor for the IEEE Journal of Quantum Electronics between 2005 and 2009. In 2010, he co-chaired an IEEE winter topical meeting on Optical Interconnects and he serves(d) as a member of the program committees for leading international conferences in his field such as ECOC, OFC, CLEO-Europe, Photonics and Switching and COIN. In 2012, he will serve as one of the TPC chairs of the European Conference on Optical Communications.

*** All are welcome to attend ***

For further information contact Prof. Chester Shu at 2609 8258