

Abstract for an Invited Paper
for the MAR10 Meeting of
The American Physical Society

Compacting high-end computing systems with silicon photonic interconnects

ASHOK V. KRISHNAMOORTHY, Sun Microsystems

The talk will present a design of a microsystem that utilizes silicon photonic interconnects to enable a highly compact supercomputer-scale system. It will describe and justify single node and multimode systems interconnected with wavelength-routed optical links, and will analyze their benefits versus electrically connected systems.