

SEMINARANKÜNDIGUNG

Dienstag, 01. März 2011

17:15 Uhr

WSI, Seminarraum S 101

„Photonic crystal VCSELs for emerging applications”

Abstract: Oxide-confined multimode vertical cavity surface emitting lasers (VCSELs) have been deployed in many millions of data communication optical links. New VCSEL structures will be needed for future applications. Separating the electronic and optical confinement can be achieved in photonic crystal VCSELs. Single mode photonic crystal VCSELs have been designed with large diameter that can be modulated at greater than 25 Gb/s. We are also exploring new digital modulation approaches that can operate at low power, such as polarization modulation. Finally, coherently coupled photonic crystal VCSEL arrays have enabled low divergence and electronically steerable output beam.

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