

COLLOQUIUM

20 September 2006

11:15 – 12:00

Meeting Room, OPL- 108
Optics and Plasma Research Department
Risø National Laboratory
DK-4000 Roskilde, Denmark

Lasers and coherent sources with integrated functionality

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Abstract

This talk would describe some recent research at the Laser Physics group, KTH, on laser and parametric devices. The fundamental idea is to add functionality by including non-conventional components in solid-state lasers and to ease fabrication by shrinking size and improving the building practice. Components that have been successful utilized for improved functionality are stratified nonlinear crystals, tunable fiber Bragg gratings, volume Bragg gratings, flexible silicone gratings, silicon building blocks and electro-optic fibers. Work on high resolution light induced material damage is another activity that aims at ultimately being able to CAD a laser for a specific application, where the input requirement could be wavelength, pulse length, repetition rate, beam quality and output power. Affiliation

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Everybody is welcome.