

ELECTRICAL & COMPUTER ENGINEERING SEMINAR

“Laser Remote Sensing”

by

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LSC Room 213-5

Abstract & Biography

Abstract. Active remote sensing is a powerful and maturing tool for collecting stand-off information about the environment. Although laser radar technologies are relatively immature when compared to radar and passive and thermal imaging sensors, select laser radar transceivers can provide turnkey 24/7 operations with favorable cost-benefit ratios to users. These systems are increasingly being employed on ground, air and space based platforms for a variety of applications. This lecture will provide a brief introduction to laser radar fundamentals and sensor types. Examples of fielded and developmental systems will be described. Questions will be encouraged.

Biography. Dr. Carrig graduated from Cornell University in 1992 with a Ph.D. in Applied Physics. After graduation he served as an instructor at Cornell teaching a senior level Electrical Engineering course on lasers and optoelectronics, before assuming a postdoctoral position at the Los Alamos National Laboratory. In 1995 he joined Coherent Technologies, Inc. (CTI) as a research scientist. At CTI he assumed roles of increasing responsibility and was named Director of Research & Development in 2003. The R&D group is currently composed of ~100 scientists dedicated to the development of innovative laser radar technologies and sensors, who hold a number of "world firsts" in the fields of solid-state laser development and laser radar system architecture. Dr. Carrig was the 2007 General Chair of the Advanced Solid-State Photonics (ASSP) topical meeting, is the current Conference on Lasers and Electro-Optics (CLEO) solid-state lasers subcommittee chair and will be a 2009 CLEO Program Co-Chair. Dr. Carrig has given Invited Talks in eight countries and most recently was a Plenary Speaker at The Fifth International Symposium on Multi-spectral Information Processing and Pattern Recognition (MIPPR) in Wuhan, China. Dr. Carrig has over seventy citations in the scientific literature and has four US patents with four others pending.

Please contact Prof. Randy Bartels, bartels@engr.colostate.edu, with any questions.