

オプティクス教育研究セミナーのお知らせ

CORE Seminar Announcement

日時：12月15日（木） 10:30～12:00

Date: Thursday, December 15th Time:10:30-12:00

場所：オプティクス教育研究センター棟 コラボレーションルーム（4F）

Place: Collaboration Room, 4F CORE Bldg

Speaker 1 : Prof. Nirmal K. Viswanathan

University of Hyderabad, INDIA

Title: Achromatic vortex-to-ultrashort pulse vector beams: An interferometric approach

Abstract : Optical angular momentum (OAM) arising due to the helical phase front of a vortex beam and the vector optical beams with spatially-varying state of polarization have occupied much of recent research interest as they find numerous applications in high-resolution imaging systems, lithography techniques, optical tweezers and quantum information. A large variety of techniques have been developed and studied for the generation of vortex and vector beams which are inherently chromatic. A closed loop Sagnac interferometer based generation of single-charge vortex beam makes our method ultra-stable, adaptable and of high conversion efficiency. The inherently achromatic vortex beam generated is suitable of high-power and short-pulse laser applications, is used for second-harmonic generation (SHG) and to generate femtosecond pulse vector beams.

Speaker2 : 和田 篤 (Wada Atsushi)

防衛大学校 電気情報学群 通信工学科 准教授

National Defense Academy of Japan

Title : Fiber Bragg grating sensor: design of sensor head and interrogation scheme

概要 : FBG センサの基本的な事を解説し、自分の研究室で行った研究事例を紹介する。講演はセンサーヘッド部分の改良の話と、センサを読みだすシステム部分の工夫の話からなる。

Abstract: Basics of FBG (Fiber Brag Grating) sensor will be reviewed with specific examples of the speaker's own research. The talk will introduce improvements in the sensor head and inventive ideas on the read-out system.

皆様のご参加をお待ちしています。

All are welcome to join us.

武田光夫・黒田和男

Mitsuo Takeda, Kazuo Kuroda