

Nonlinear Fiber Optics: New Fibers - New Opportunities

Professor John Dudley, IEEE-LEOS Distinguished Lecturer

Abstract

Research in nonlinear fiber optics is currently undergoing dramatic expansion, motivated both by advances and developments in new classes of optical fiber, and the availability of sophisticated numerical modelling techniques. This work will present a survey of selected recent work in this field, covering topics such as supercontinuum generation, self-similar evolution of optical pulses in optical fiber amplifiers, pulse compression, frequency conversion and regeneration.

Biography

Originally from Otahuhu in New Zealand, John Dudley received B.Sc and Ph.D. degrees from the University of Auckland in 1987 and 1992 respectively. In 1992 and 1993, he carried out postdoctoral research at the University of St Andrews in Scotland before taking a lecturing position in 1994 at the University of Auckland. In 2000, he was appointed Professor at the University of Franche-Comte in Besancon, France, where he heads the Optoelectronics, Photonics and Optical Telecommunications research group. He was named a member of the Institut Universitaire de France in 2005 and elected a Fellow of the Optical Society of America in 2007. He is an IEEE LEOS Distinguished Lecturer for the period 2008-2009. This technical meeting is sponsored by IEEE LEOS.

Further information: <http://dudleyphotonics.googlepages.com>