

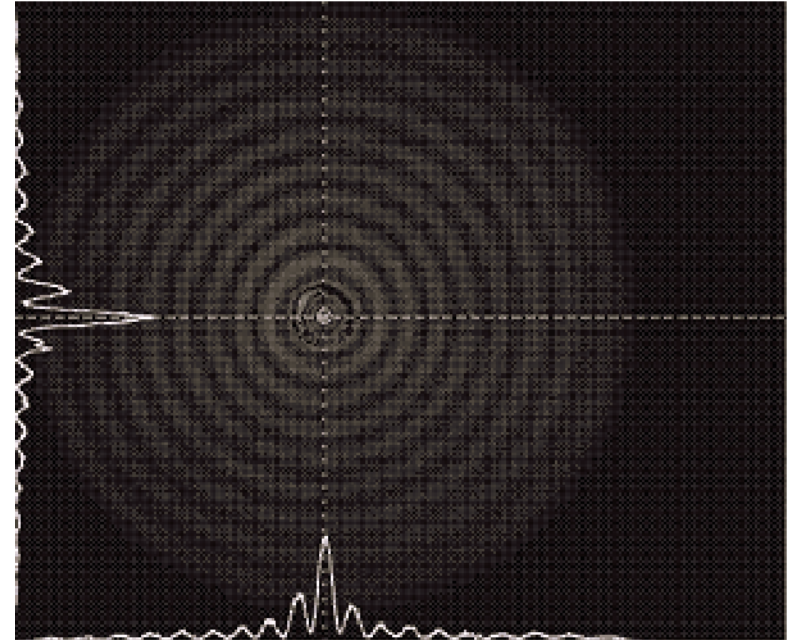
## Higher Order Mode Amplifiers



**Dr. Clifford Headley**  
**OFS Fitel Laboratories**

BS and MS in EE, U of Texas Arlington  
PhD in Optics, U of Rochester 1995  
Bell Labs 1995

This talk will examine the possibility of amplifying higher order modes to overcome some of the limitations of nonlinear effects, modal stability, and a bend induced reduction in the fiber area when the fiber is coiled in high power fiber amplifiers.



**3:00 pm, Monday, April 5, 2010**  
Sloan Auditorium, Goergen 101  
Refreshments provided.

# Higher Order Mode Amplifiers

**Dr. Clifford Headley**

OFS Fitel Laboratories

**Abstract:** As ever increasing power levels are required from fiber amplifiers several limits begin to appear. These challenges include the onset of nonlinear effects, modal stability, and a bend induced reduction in the fiber area when the fiber is coiled. In this talk we examine the possibility of amplifying higher order modes to overcome some of these limitations.

**Biography:** **Dr. Clifford Headley** received the B.S. and M.S degrees in electrical engineering from the University of Texas, Arlington in 1986 and 1988 respectively, and his Ph.D. degree in optics from The Institute of Optics, University of Rochester, Rochester NY, in 1995. In 1995 he joined the Bell Laboratories. The results of his work include 7 patents, an author or coauthor on over 60 journal and conference articles, 2 book chapters, and co-editor of a book on Raman amplification. He has given several invited talks at both national and international conferences. He is currently a Technical Manager of the Lasers Amplifiers and Nonlinear Devices group in OFS Fitel Laboratories.