

*Colloquium Sponsored by the School of Materials Science & Engineering*

## "News of the Universe . . . "

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### **ABSTRACT:**

Sir William Bragg presented a Christmas Lecture for the Royal Institute in London in 1931 which opened with the striking phrase: "Light brings us news of the universe". This talk will look back at what Bragg meant by this: how astronomy brings us striking knowledge about the endless universe of space, while spectroscopy brings us equally striking knowledge about the miniature worlds inside atoms and molecules; and also look forward at how light beams from lasers bring us ever deeper knowledge about our physical universe through remarkable new scientific applications, and how light traveling through optical fibers brings us news of the entire human intellectual universe through the wonders of the Internet and the World Wide Web.

### **Biography:**

Brief Biography: Professor A. E. Siegman

Anthony E. Siegman was born in 1931, received degrees from Harvard, UCLA and Stanford University, and retired from a four-decade-long career as a Stanford faculty member in Electrical Engineering and Applied Physics at the end of 1998. During his career he made many contributions to microwave and quantum electronics, laser physics and devices, and optics including 40 PhD dissertations, 250 scientific articles, and three books including a widely used text on LASERS. He was elected to both the National Academy of Engineering and National Academy of Sciences and received the Wood Prize and Ives Medal from the Optical Society of America, the Quantum Electronics Award from IEEE LEOS, and the Schawlow Medal from the Laser Institute of America. He consulted for numerous companies and government agencies and was a member of Air Force Scientific Advisory Board from 1974 to 1980. Following retirement he served as President of the Optical Society of America during 1999, and is currently engaged in optics research and writing and technical and legal consulting.

**Thursday, October 27, 2005**

**5:00 PM – Room 200 – Olin Hall**

**Refreshments Following Seminar**