

# More and More; Faster and Faster (Fibre Optics and the Internet)



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知識科学研究科講義棟 1F エントランスホール  
Entrance of KS Lecture Hall

The modern world has become totally dependent on the Internet. Underlying the Internet and the World Wide Web is the physical structure of fibre optic cables and supporting equipment for the transmission of information for many purposes. International telephone calls, banking and stock market transactions, the vast majority of medium and long distance data transmission is now by fibre, and the modern world has become totally dependent on it. In the talk first of all the sheer quantities of information being transmitted are considered, with illustrations from every day experience, and the reasons behind the very rapid expansion discussed. The basic operation of fibre optic cables and the way we transmit information over very long distances, such as across the major oceans, is illustrated. The final part of the talk considers some of the limitations and difficulties the fibre network faces in the future to meet ever increasing demands.

The talk is intended for the interested lay man, and is non-mathematical. However for those with a physics background, hopefully it may also provide food for thought for those not specialising in fibre optics.



エントランスホールは、  
知識講義棟1F、中講義室の真下  
学生・留学生支援課前の階段を下りた先です。  
Entrance of KS Lecture Hall is front of KS  
Lecture room 1-2.

学内連携セミナーは、JAISTで行われている研究の知識共有を目指しています。専門家以外も楽しめるセミナーを行いますので、ぜひ講師以外の研究科の方もご来聴下さい。

世話人: 鶴木、小矢野、橋本、長谷川、戸田、寺倉