自由空間光通信&中継技術

Free-Space Optical Communications & Relaying Techniques

自由空間光通信 Free-Space Optical

Using light waves to transmit information through free-space medium (air,

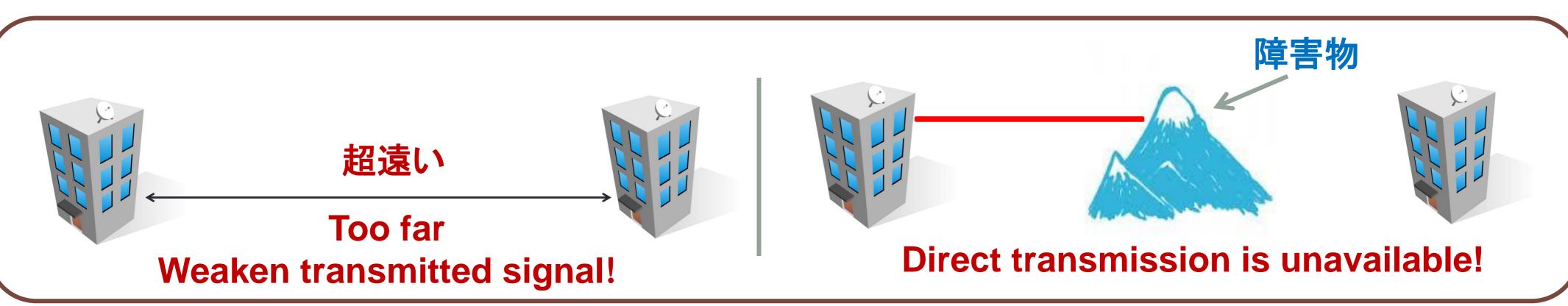
vacuum...)

❖ 応用

LAN-to-LAN connection

Inter-satellite communication **Transmitter** Last mile access

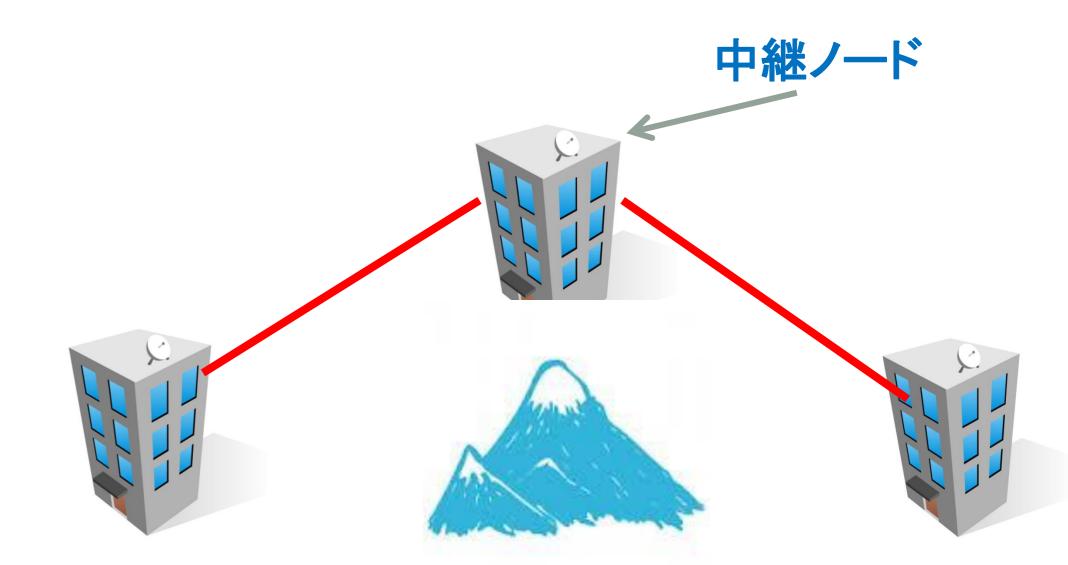
⇔問題





Divide communication path into several shorter hops

- ◇ 中継戦略: 中継ノードで光信号のプ ロセス方法です。
 - > The signal is decoded before retransmitted to next node: Decodeand-forward (DF)
 - > The signal is just amplified before retransmitted to next node: Amplifyand-Forward (AF)



Information carrying

Laser Beam

Avoid the obstacle

