



# **ITU-T Kaleidoscope Conference Innovations in NGN**

**'NGN Access using Full-Optical Links'**

**M Matsumoto et al, Osaka University JP**

**'Differential phase shift quantum key distribution'**

**H Takesue et al, NTT Corporation JP**

**High speed modulators using hybrid silica / LiNbO3 approach**

**H Yamazaki et al, NTT Photonics Labs JP**


**Exploring adaptable access in NGN**

**K Krechmer, Colorado University US**

**Session 8, 'Pushing the envelope'**

**Session Chair, Charles Sandbank**

**ITU-T SG 9 / Bradford University UK.**



**Geneva, 12-13 May 2008**

# Highlights from Session 8

- 10 Gbps free space delivery directly matched and coupled to fibre at 1550 nm.
- Single photon operation to obtain detection of photon number splitting eavesdropping.
- Hybrid silica LN substrate modulators demonstrated in a system transmitting 20.4 Tbps DQPSK over 240 km.
- The demands of NGN will require adaptive access technology but without etiquette standards there will be chaos!

# Conclusions / Recommendations

- We have to start to prepare for the impact on standards activities of technologies (such as all optical) providing data rates at levels several orders above those in current practice.
- Early collaboration with Academia will alert us to new developments and reduce the risk of creating 'legacy' problems by being locked into technologies requiring backward compatibility.
- ITU should try to find a way for Universities to join or participate by means which they can afford.



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