

# The wave-particle duality of light

*Friday 3 April 2009 11:00 (30 minutes)*

A Mach-Zehnder interferometer (MZI) operated by single photons with photomultiplier detection and oscilloscope and acoustic display is used to demonstrate that light behaves simultaneously as particles and as waves. By averaging single photon events registered by a digital oscilloscope one sees the emergence of the classical fringe pattern.

**Presenter:** Prof. WEIS, Antoine

**Session Classification:** Exchanging experiments