Quantum Interference from Independent Photons

RAINER KALTENBAEK, BIBIANE BLAUNSTEINER, MARKUS ASPELMEYER, University of Vienna, ANTON ZEILINGER, University of Vienna and Institute for Quantuum Optics and Quantum Information (IQOQI) — Quantum interference of photons generated from independent sources is a topic of wide interest both for fundamental quantum optics and for quantum communication. Regarding the latter, such effects are crucial to distribute entanglement over long distances and thus allow quantum networking. We will discuss recent experiments towards quantum interference of truly independent single and entangled photons.

Markus Aspelmeyer
University of Vienna

Date submitted: 16 Dec 2004