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Reference - Direct generation of photon triplets using cascaded photon-pair sources, Hübner, Hamel, Fedrizzi, Ramelow, Resch and Jennewein, Nature, 466, 601-603 (29 July 2010)

### Abstract

An experiment was carried out in order to produce entangled photon triplets using a theory proposed 20 years ago but never tested. A down-conversion source is pumped to create a photon pair. Then one of these photons undergoes a second down-conversion process, resulting in the production of another pair. The overall result is a photon triplet. Histograms of detected photon triplets against the time interval between detecting the photon at the first down-conversion processor and the third over a period of twenty hours shows that a sharp peak is observed around where the time interval is zero. This agrees well with what was expected.