



Prof. Christian Kurtsiefer Centre for Quantum Technologies and Department of Physics National University of Singapore 3 Science Drive 2 Singapore 117543

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Pre-submission inquiry to nature photonics

Dear Editor,

please find enclosed our manuscript entitled "Hong-Ou-Mandel interference" between triggered and heralded single photons from separate atomic systems" – we believe this reports on an important experimental demonstration how to connect to different physical systems for quantum information purposes on the way towards more complicated quantum networks.

This is a pre-submission inquiry, where we would like to sound the waters if you would consider this type of work to be of interest for publication in nature photonics.

As stated before, this is mostly experimental work, where we can demonstrate that the two photons emitted by two different physical systems can be made indistinguishable enough to allow for an interference between them. While (to our knowledge very few) comparable experiments have been performed before, we do want to stress that in our case, no spectral filtering did take place, which makes the process much more efficient, and could potentially lead to a more scalable network of different quantum nodes.

We prepared the manuscript in a way more or less compatible with a number of AMO physics journals. However, we do believe this work could be of a wider interest to the photonics community, and perhaps inspire researchers working on other photonic systems to explore similar ideas, therefore this request if you find this a work potentially suitable for publication with nature photonics.

Looking forward for your reply, and with Best Regards on behalf of all authors,

Christian Kurtsiefer