## Mode engineering for realistic quantum-enhanced interferometry

## **Konrad Banaszek**

We show that appropriate preparation and detection of the modal structure of photons used in quantum-enhanced interferometry can alleviate deleterious effects caused by other, experimentally inaccessible, degrees of freedom. We present an experiment in which spatial mode engineering restores sub-shot noise precision of two-photon interference degraded by residual spectral distinguishability.