

# Topology as a degree of freedom for multiphoton entanglement

Andrea Blanco-Redondo<sup>1</sup>

Cooper Doyle<sup>2</sup>, Wei-Wei Zhang<sup>2</sup>, Bryn A. Bell<sup>3</sup>, Stephen D. Bartlett<sup>2</sup>

<sup>1</sup>Nokia Bell Labs, 600 Mountain Ave., New Providence NJ 07922, USA

<sup>2</sup>School of Physics, The University of Sydney, Sydney, NSW 2006, Australia

<sup>3</sup>Department of Physics, Imperial College London, Prince Consort Rd., London SW7 2AZ, UK

[Andrea.blanco-redondo@nokia-bell-labs.com](mailto:Andrea.blanco-redondo@nokia-bell-labs.com)

## Abstract

In this talk we will discuss the recent advances on the use of lattice topology to robustly generate and transport multiphoton entangled states [1-3]. We will make special emphasis on our recent experimental demonstration of biphoton entanglement between topologically-distinct modes in a bipartite silicon photonics lattice [4]. These results highlight topology as a degree of freedom for entanglement and could have implications in quantum information.

## References

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## Figures

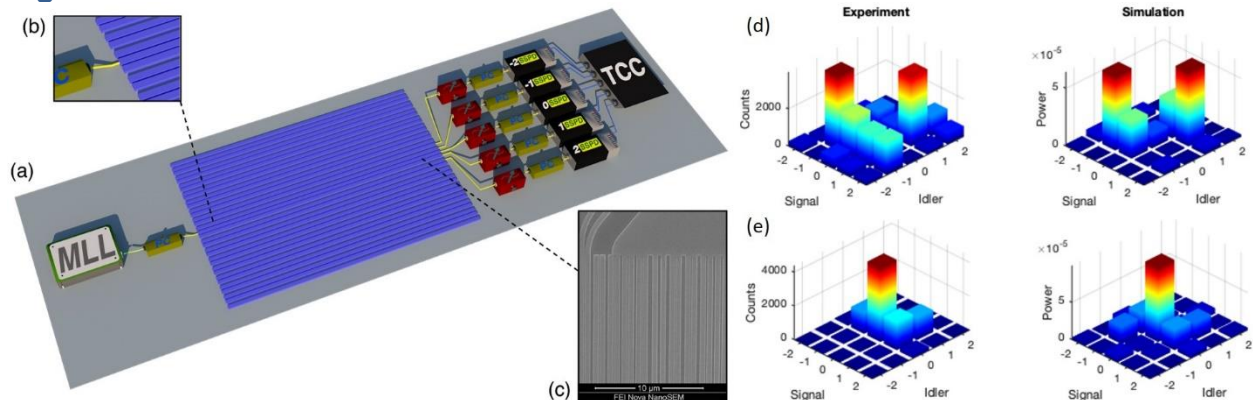


Fig. 1: Measurements of multiphoton entanglement of topologically different modes.